COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 11-2, *Aircraft Rules and Procedures*; AFPD 11-4, *Aviation Service;* and AFI 11-202V1, *Aircrew Training.* It applies to all AFMC units, AFRC units under AFMC OPCON, and AFMC gained units and personnel conducting flying operations. Attachments to this instruction prescribe Mission Design Series (MDS) specific operating procedures. Units will maintain all applicable attachments for assigned/possessed aircraft. Field units below MAJCOM level will forward copies of their proposed supplements to this publication to AFMC/DOV for review and approval. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program.* See paragraph **1.3.** of this instruction for guidance on submitting comments and suggesting improvements to this publication. Maintain and dispose of all records created as a result of processes prescribed by this instruction according to AFMAN 37-139, *Records Disposition Schedule*. This instruction is affected by the paperwork Reduction Act of 1974 as amended in Aug 1998.

The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of the system is Title 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), and Executive Order 9397.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. GENERAL INFORMATION.

1.1. Program Goals. The AFMC aircrew training program objective is to ensure aircrews are trained appropriately to execute AFMC's flight test mission safely and effectively. Ground and flying training requirements established in AFI 11-202 Volume 1, AFMC Sup 1, and this instruction apply to all AFMC aircrew members and AFMC gained units and personnel conducting flying operations. This instruction does not apply to the Air National Guard or US Air Force Reserve units and members except those under AFMC OPCON.

1.1.1. AFMC publishes a three-volume set of Flight Test (FT) instructions containing attachments for each weapon system flown in AFMC. These instructions are numbered AFI 11-2FT Volume 1, 2, and 3, and will contain the training, evaluation criteria, and operations procedures, respectively, for each weapon system. AFMC uses these instructions in lieu of AFI 11-2 MDS-specific Volumes for flying operations. In the absence of published guidance AFMC units will coordinate with HQ AFMC/DOV for approval of locally developed guidelines. If possible, these guidelines should be consistent with similar guidance specified in the appropriate AFI 11-2 MDS-specific Volumes. In addition, aircraft on loan to AFMC undergoing short-term flight test programs will be flown according to the lead MAJCOM guidance if no AFMC guidance exists.

1.2. Supplements. The flying unit will supplement this instruction if required to include:

1.2.1. Training for aircraft and/or crew positions not specifically covered in this instruction.

1.2.2. Ground and flying training requirements needed to qualify aircrews for the unit's mission.

1.2.3. Ground and flying training requirements needed for conversion and difference training.

1.2.4. The unit may direct additional required training not covered in this instruction in order to meet any unit specific requirements. The Director of Flight Operations (DFO) will publish any unit specific training requirements (utilizing MAJCOM approved training form overprints) in a supplement to this instruction.

1.2.5. Send unit supplements to HQ AFMC/DOV, 508 W. Choctawhatchee Ave, Suite 4, Eglin AFB, FL 32542-5713, for review and approval prior to publication. Include AFMC/DOV and AFMC/DOO on the distribution list for approved supplements.

1.3. Changes. Send recommended changes on AF Form 847, **Recommendation for Change of Publication,** to HQ AFMC/DOV, 508 W. Choctawhatchee Ave, Suite 4, Eglin AFB, FL 32542-5713. HQ USAF/XO is the approval authority for interim changes (IC) and revisions to this instruction.

1.4. Waivers. Unless otherwise specified in this instruction, HQ AFMC/DOV is the waiver authority for this instruction. All waivers will be routed through appropriate training channels to flying unit commanders, intermediate level training offices and DFO, prior to submission to HQ AFMC/DOV.

1.5. Records Disposition. Records will be disposed of IAW AFM 37-139, *Records Disposition Schedule.*

1.6. Responsibilities.

1.6.1. Flying unit commanders and supervisors at all levels must monitor the progress of crew-member training to ensure timely progression through the appropriate training phases and to identify areas in which an aircrew member needs more training.

1.6.2. The squadron training office will:

1.6.2.1. Develop and implement programs to carry out required aircrew training.

1.6.2.2. Ensure compliance with training directives.

1.6.2.3. Ensure all prerequisites are completed before entering a crewmember into any phase of training

1.6.2.4. Ensure all required reviews are completed.

1.6.2.5. Track Phase I and II training progress (entry and training completion dates as a minimum) via a locally developed process.

1.6.2.6. Maintain and conduct periodic reviews of aircrew training folders for all assigned/ attached flyers.

1.7. Training Guidelines:

1.7.1. Requirements established in this instruction may be more restrictive than AFI 11-202 Volume 1, *Aircrew Training*, and the AFMC supplement. If so, the requirement in this instruction takes precedence.

1.7.2. Unit Developed Training Plans. The MDS-specific attachments to this instruction prescribe lesson plans for most aircraft, missions, and aircrew members in AFMC. AFMC flying units will publish ground and flying training programs for those aircraft, missions, and aircrew positions (to include mission crewmembers) that are not included in this instruction. These training plans should include all ground, flying, and continuation requirements Send locally developed training programs to AFMC/DOV for review and approval.

1.7.3. Special Aircraft Training Requirements. Units will establish crewmember training requirements for those aircraft designated as developmental, experimental, pre-production, or prototype. If the unit determines adequate crewmember flight currency and proficiency cannot be solely maintained in the test aircraft, then crewmembers will maintain currency and proficiency in an AFMC operational aircraft. This AFMC operational aircraft will be similar, in flight characteristics and handling qualities, to the specific test aircraft. If so designated by the unit, flying proficiency events accomplished in the test aircraft may be credited toward total training requirements.

1.7.4. Accepting Previous Qualification. Flying unit commanders may accept an individual's basic aircraft qualification, mission, and upgrade training from non-AFMC sources or other AFMC units. Acceptance will be predicated on applicable validation such as the AF Form 8, **Certificate of Aircrew Qualification**, or other appropriate documentation. Document all accepted qualifications on AF Form 1381, **USAF Certification of Aircrew Training**. Annotate "Previous Qual" above the date (if known) in the date block for qualifications accepted. If another unit's qualification training is accepted, the flying unit commander will ensure AFMC-specific training items are covered in adequate detail. If additional training is required, document training in the individual's aircrew training folder.

1.7.5. If an event listed in AFI 11-202, Volume 1, AFMC Supplement 1, or this instruction has no AFMC or flight manual guidance, units will coordinate with HQ AFMC/DOV for approval of locally developed guidelines. If possible, these guidelines should be consistent with similar lead MAJCOM guidance specified in the appropriate AFI 11-2 MDS-specific Volumes. Events/maneuvers without established AFMC, flight manual, or lead MAJCOM guidance are prohibited unless they are flown as part of an approved test plan.

1.7.6. The USAF Test Pilot School (TPS) will conduct training for students as directed in the USAF TPS syllabus.

1.7.7. Training Phase Sequencing and Duration Limitations.

1.7.7.1. Crewmembers will not be entered into concurrent phase I training programs. Pilot phase I training and flight evaluation will be completed prior to beginning phase II training unless authorized in AFI 11-2FT Volume 1 MDS-specific attachments. The following exceptions apply:

1.7.7.1.1. Air refueling, low level, and LAO training may be conducted during phase I training. Comply with training duration restrictions outlined in paragraph **1.7.7.3.** of this instruction.

1.7.7.1.2. Pilots may complete phase I conversion/difference training and phase II training concurrently. Comply with training duration restrictions outlined in paragraph **1.7.7.3.** of this instruction.

1.7.7.1.3. Pilots may start phase II training prior to completing the phase I night landing/ night checkout sortie requirements.

1.7.7.1.4. If the night landings/night checkout sortie cannot be completed within 4 months of the first phase I training sortie, the flying unit commander may authorize extending the due date for this event. See paragraph **2.4.2.3.** for guidance on authorizing an extension.

1.7.7.2. AFMC flying units may conduct non-pilot aircrew phase I initial qualification, requalification, conversion, or difference training and phase II mission qualification training concurrently. Comply with training duration restrictions outlined in paragraph **1.7.7.3.** of this instruction.

1.7.7.3. Required flying training (to include a flight evaluation, as applicable) will be completed within four months (six months for traditional reservists) of the first flight for each phase of training except mission training. For mission training, required flying training will be completed within six months of the first flight.

1.7.8. Instructor Requirements.

1.7.8.1. An instructor of a like specialty that is fully qualified and trained in the specific system and task to be instructed (i.e., pilots instructing pilots) will conduct training. The following exceptions apply:

1.7.8.1.1. Crew positions that have systems in common may be instructed by unlike crew positions (i.e., WSOs instructing pilots), if the tasks are similar in nature. Training may also be conducted by unlike crew specialties if outlined on an approved lesson plan. In-flight, the instructor must be in a position to correct or override the student if an action performed is inappropriate.

1.7.8.2. Direct Instructor Supervision: This term indicates the requirement for a current and qualified instructor to be in a position to correct/override the student if an action is inappropriate. For pilots a current and qualified instructor would be required at a set of flight controls.

1.7.8.3. Instructor Supervision. This term indicates the requirement for a current and qualified instructor to be in a position to verbally correct/instruct a student if an action is inappropriate. For fighter/trainer aircraft this may be accomplished from a chase aircraft.

1.8. AFMC Directed Training.

1.8.1. Theater Indoctrination Training. AFMC flying units conducting flying operations to/from deployed locations outside of the CONUS will ensure aircrews are thoroughly trained for specific theater operations. This training may be accomplished in conjunction with normal pre-mission planning. As a minimum, this training will include a thorough review of ICAO instrument procedures, theater unique instrument requirements and procedures, the use of non-DOD/NOAA instrument approach procedures, required instrumentation for specific approaches, theater weather conditions, local area procedures, host nations agreements, specific theater NOTAMS, and Foreign Clearance Guide.

1.8.2. Local Area Orientation. AFMC flying units will establish ground and flying training requirements for Local Area Orientation (LAO). Newly assigned pilots and navigators will not perform aircrew duties, except under the supervision of an instructor, until they complete this training. Ground training will include, as a minimum, a briefing on the local area instrument flight rules (IFR) and visual flight rules (VFR) procedures, restrictions, navigation aids, and unit aircraft differences. LAO training will also include an introduction to AFMC command specific rules and directives if the crewmember is new to AFMC. LAO flying training may be conducted concurrently with phase I or phase II training. Only one LAO is required for aircrew qualifying in more than one of the unit's aircraft. Document this training in section four of the individual's training folder.

1.9. Air Force Operations Resource Management System (AFORMS).

1.9.1. AFORMS, IAW AFI 11-401 AFMC Supplement 1, will be used to track and manage recurring crewmember training. Flying units will use prescribed AFMC AFORMS EVENT IDENTIFIERS listed in **Attachment 2** to this instruction. The unit training office will select AFORMS training profiles that best suit the unit's needs. As a minimum provide, on a monthly basis, each crewmember a current copy of individual training summary. This requirement may be accomplished electronically. The individual training summary should reflect the individual's flying training requirements, currency, and proficiency events. The individual currency summary should document the individual's flight evaluation and associated training due/accomplished dates along with recurring ground training due/accomplished dates. The unit will publish an end-of-half training summary document. The unit will maintain this end-of half product for the current and previous semiannual training period.

1.10. Training Folders:

1.10.1. The training folder is used to conduct and track training. It also serves to document completed training.

1.10.2. Training folders are required for all crewmembers (primary, mission, and operational support flyers) entered into any phase of training. For multi-qualified primary aircrew, make separate training folders for each aircraft. Non-primary aircrew training folders may contain multiple aircraft training documentation.

1.10.3. Active training folders will be kept in a location readily accessible to instructors and trainers, supervisory personnel, and the individual crewmembers in training. Instructors and trainees will review training folders for each specific training session. Upon completion of the session, the training folder must be promptly completed and returned to the training office for the appropriate training office review.

1.10.4. Unit training managers will file completed training folders in a permanent inactive status as long as an individual is assigned to the unit. If the individual changes units, the training office will insure the training folder is forwarded to the gaining unit. If an individual separates/retires from the USAF or is assigned to a non-flying position, the unit will give the training folder to the individual.

1.10.5. Organize training folders as follows:

1.10.5.1. Place a label with the trainee's name, grade, aircraft, and crew position on the folder.

1.10.5.1.1. Appropriately divide the folder into separate sections. Use lesson plans as documentation in these sections. File completed lesson plans as a set (applicable AFMC Forms 67, 68, and 69) with the most recent set on top. The set should be ordered with the AFMC Form 67 first, the AFMC Form 68 next, and the AFMC Forms 69 last.

1.10.5.1.2. Section One. This section will contain ground and flying training documentation for initial qualification, requalification, conversion, and difference training.

1.10.5.1.3. Section Two. This section will contain ground and flying training documentation for mission qualification or mission requalification training. It will also contain documentation for specialized mission areas, such as air refueling, functional check flight (FCF), etc.

1.10.5.1.4. Section Three. This section will contain ground and flying training upgrade documentation for copilot to first pilot (aircraft commander), instructor (aircraft and mission), and flight examiner upgrade training.

1.10.5.1.5. Section Four. This section will contain training plans not considered part of sections 1, 2, or 3 such as LAO, Theater Indoctrination training, and SOF/ODO checkout.

1.10.5.1.6. Section Five. This section will contain all training correspondence to include entry into training letters, DFO approvals/authorization, waiver approvals, email coordination, acceptance of aircraft, mission, and/or upgrade qualifications, and memorandums for record.

1.10.6. Training Forms:

1.10.6.1. Reproducing Attachments to This Supplement. In order to provide lesson plans for individual crewmember folders, flying units will download electronic forms from the HQ AFMC Publishing Distribution Library at: **https://www.afmc-mil.wpafb.af.mil/pdl/** and locally reproduce them as necessary. Locally developed forms may be used if they are exact duplicates of the electronic versions (e.g., forms created in Microsoft™ Word).

1.10.6.2. The AFMC Form 67, **Ground Training Record**, will be used to record all ground training required before the trainee's first flight. This form provides for the overprint of required ground training tasks. It will be used to document required ground training events. Any additional ground training (simulators, cockpit procedural trainers, etc.) accomplished

during the flying training phase will be documented on the AFMC Form 68. File the AFMC Form 67 in the appropriate section of the training folder. **Table 1.** provides detailed instructions for completing this form.

Table 1. Instructions for Completing AFMC Form 67, Ground Training Record.

A	B	C
Item	**Description**	**Entry**
1	Name/Rank	Self-explanatory.
2	Aircraft	Specific MDS of aircraft for which training is being accomplished.
3	Crew Position	The crew position to which the individual is upgrading. For example, if training is for upgrade to IP, list IP in this item.
4	Type of Training	Enter the exact type of training being performed. (i.e, F-15A to F-15E conversion training.)
5	Training Events	The left column will list the tasks and subtasks requiring specific trainee knowledge. The training events required will be established by the OPR for the training being accomplished. In the right columns, the instructor conducting the training will print his name and date that the specific training event was completed.
6	Trainee's Signature/Date	The trainee will sign and date when the last training item is completed.
7	Instructor's Signature/Date	The instructor completing the last required training item on the form will sign and date. The instructor's signature certifies that the all required ground training events have been accomplished.
8	Remarks	Record any pertinent comments or direction regarding specific training.

1.10.6.3. The AFMC Form 68, **Flying Training Record**, will be used to record all flying training. This form provides for the overprint of required training tasks and end-of-course proficiency levels for each ground/flying training task. It will also record the number of events accomplished and proficiency level attained by the trainee. The AFMC Form 68 lesson plans established in this instruction and MDS-specific attachments will list, as applicable, the minimum required training events to be completed for initial qualification (QUAL), requalification (REQUAL), and instructor upgrade (INST). **Table 2.** provides detailed instructions for completing this form.

Table 2. Instructions for Completing AFMC Form 68, Flying Training Record.

A	B	C
Item	Description	Entry
1	Name/Rank	Self-explanatory.
2	Aircraft	Specific MDS of aircraft for which training is being accomplished.
3	Crew Position	The crew position to which the individual is upgrading. For example, if training is for upgrade to IP, list IP in this item.
4	Type of Training	Enter the exact type of training being performed. (i.e., C-130A to C-130H conversion training.
5	Training Events	The left column will list the tasks and subtasks requiring a specific trainee proficiency standard. All items require a proficiency level "P" or must be identified with a "D". Break the tasks out by general areas (i.e., discussion topics, ground operations, emergency procedures, etc.). The right 6 columns (excluding the far right, total events) correspond to the sorties accomplished. Record in each of these columns the number of events accomplished and proficiency level attained (#/P, #/T, or #/D) during the sortie. The training events required will be established by the OPR for the training being accomplished and include the minimum number of events that must be accomplished by the trainee to complete training. The trainee must attain a proficiency level of "P" on the accomplishment of the last event, otherwise he or she remains in a training status until proficiency is attained. If two lesson plans are conducted concurrently, i.e., requalification training and instructor upgrade, and similar events are required on both, the highest minimum requirement listed will be accomplished. Indicate the type of training to be accomplished by circling it or highlighting the appropriate column.
	Qual	Minimum number of events required to complete this lesson plan.
	Requal	Minimum number of events required to complete this lesson plan.
	Inst	Minimum number of events required to complete this lesson plan.
6	FlightEvaluation/ Training Due Date	Date flight evaluation or training completion is due. See paragraph **1.7.7.3.** for time limits.
7	Reviewing/ Certifying Officer and Date	Signature and date of DFO, squadron commander, or operations officer signifying completion of training prior to administering flight evaluation. If flight evaluation is not required, the signature certifies all training is complete and individual is certified to perform the particular mission for which training was accomplished.
8	Instructor/Date	Date and signature of instructor upon completion of specific sorties.
9	Remarks	Record any pertinent comments or direction regarding specific training.

1.10.6.3.1. Proficiency Advancement. All events listed must be completed the minimum number of times, and the trainee must show proficiency (P) in each event before training is complete. EXCEPTION: If the student demonstrates proficiency for at least 50 percent of the minimum required events, the instructor, with training officer concurrence, may proficiency advance that item. For example: if the minimum number of required air refueling contacts was 4 and the student is proficient for at least two contacts, then the instructor may proficiency advance that training item. Comments on the associated AFMC Form 69 will describe which items were advanced. Training officer initials/signature in block 9 serves as concurrence for proficiency advancement. If training is complete, the number of required sorties may also be reduced using these same guidelines. If the student reaches proficiency and then regresses, proficiency must be regained before training is complete.

1.10.6.3.2. Training events listed may be completed in any order; however, student progression should be based on level of performance. At first, training should be designed to familiarize the student with the normal operation and flight characteristics of the aircraft. The student should then advance to the more challenging aircraft operations. The instructor will be responsible for constructing a profile for each training flight based on the student's proficiency and the minimum number of events to be completed.

1.10.6.4. The AFMC Form 69, **Flying Training Comments**, will be used to document flying training. This form is used in conjunction with AFMC Form 68, or can be used independently to document training (e.g. recurrency training). It provides for narrative descriptions of the trainee's progress and a means for documenting the training office review. Maintain with AFMC Form 68 in the appropriate section of the training folder. A separate AFMC Form 69 should accompany each type of flight training received (i.e. each AFMC Form 68). The instructor will document any significant problems the student has in completing a training event in enough detail so that subsequent instructors can provide appropriate training. **Table 3.** provides detailed instructions for completing this form.

1.10.6.5. The AF Form 1381, **Certification of Aircrew Training**, will be used to document all training to include qualification, mission, upgrade and specialized qualifications and certifications. Units may document any other special qualifications that are tracked on the qualification roster (Letter of Xs). For multiple qualified aircrew members, document training received in one aircraft, which qualifies him/her in additional aircraft by annotating the specific training being credited and the aircraft in which the training was completed. The AF Form 1381 will be filed inside the front cover of the training folder.

Table 3. Instructions for Completing AFMC Form 69, Flying Training Comments.

A	B	C
Item	**Description**	**Entry**
1	Name/Rank	Self-explanatory.
2	Type Of Training	Enter the exact type of training being performed. (i.e., F-15A to F-15E conversion training.
3	Flight Number	Consecutive sortie number to agree with corresponding sortie number on AFMC Form 68. Units may consider a preflight/ground abort a sortie if any training is accomplished (may not credit a sortie for currency or proficiency). Units may also use an abbreviation such as LAO 1, as long as the same designation is used on the AFMC Form 68.
4	Date	Date of the specific sortie.
5	MDS	Mission, design and series of aircraft in which training was accomplished.
6	Comments	MISSION OVERVIEW: Describe the mission scenario, including mission profile, and any events that impacted the mission (i.e., tanker MX cancel, weather, etc.). STRENGTH: Comments should elaborate on trainee's strengths and indicate student progress. WEAKNESS: Describe the trainee's weaknesses, identify problem areas, and areas requiring student self study, and record unusual circumstances. RECOMMENDATIONS: Recommendations should include tasks requiring further training and the type of training required. Local overprints are authorized. If more space is needed, use the next blank section. Upon completion of all training requirements, a statement such as "Recommended for evaluation." or "All training requirements for weapons delivery completed." is appropriate. However, a statement such as "cleared for weapons delivery mission" is not appropriate as only DFO, squadron commander, or operations officer may clear an individual for a mission.
7	Instructor	Instructor will sign at completion of sortie.
8	Student/Date	Trainee will sign and date at completion of sortie.
9	Training Office Review/Date	The training officer/NCO, or individual in the trainee's chain of command, will review the comments before the next training sortie. He or she should highlight any comments that are pertinent to follow-on training. Annotate this review by initials of training officer/NCO conducting review and date of review. When conditions preclude a timely review, the instructor will explain in remarks.

2. AIRCRAFT QUALIFICATION TRAINING (PHASE I).

2.1. General. This section outlines training needed to qualify an aircrew member for basic aircrew duties in an assigned position for a specific aircraft. In addition to the training guidance outlined in AFI 11-202, Volume 1 as supplemented, use this instruction when completing qualification training in AFMC. Phase I training includes Initial Qualification, Requalification, Transition, Senior Officer/Test Pilot, and Conversion/Difference training.

2.1.1. Formal Qualification Training. This training will normally be accomplished at the appropriate ETCA formal training course or an AFMC approved contractor run facility. In the event, the ETCA training is not practical, available, or does not exist, qualification training may be accomplished locally IAW provisions of AFI 11-202, Volume 1, AFMC Supplement 1 and this instruction. This local training, if approved, will be conducted using a current version of the appropriate ETCA formal courseware.

2.1.2. Local Qualification Training. HQ AFMC/DOV is the waiver authority to conduct local qualification training, and to amend formal requirements of locally conducted qualification training.

2.1.2.1. Requests to conduct local qualification training will include the following:

2.1.2.1.1. Justification for the local training in lieu of formal course training.

2.1.2.1.2. Summary of individual's flying experience.

2.1.2.1.3. Proposed training syllabus and schedule to include training start date and planned completion date.

2.1.2.1.4. Training program differences from ETCA formal course or, if applicable, the MAJCOM authorized program.

2.1.2.2. Current and complete ETCA formal school courseware or AFMC approve contractor provided courseware will be used to conduct local qualification training. Courseware need not be converted to standard command formats.

2.1.3. Instructor Requirements. For qualification flying training in all aircraft with two pilot positions, the IP must be in the aircraft at a seat with immediate access to the flight controls. In fighter or trainer aircraft, the training will be conducted in a two seat aircraft. If a two seat aircraft is not available, the IP may supervise in a chase aircraft.

2.2. Training Prerequisites. Before entering qualification training, each crewmember will meet the requirements outlined in AFI 11-202 Volume 1 and **Table 5.** of this instruction as applicable.

2.2.1. Centrifuge Training. All crewmembers and flight surgeons assigned to high G aircraft as defined by AFI 11-404, *Centrifuge Training for High-G Aircrew*, will attend centrifuge training. Individuals who have never received this training, or have been out of the cockpit for 3 or more years, must complete training IAW AFI 11-404, within 90 days after beginning flying training, or as required by the MAJCOM providing the flying training. Waivers to this requirement will be very limited, and must be routed through HQ AFMC/DOV for approval by HQ AFMC/DO or higher authority as prescribed by AFI 11-404.

2.3. Ground Training.

2.3.1. First Flight in a Single-Seat Aircraft. Single seat fighter pilots will complete written quali-
fication examinations before the first flight IAW AFI 11-202 Volume 1, AFMC Supplement 1.
This applies whether the first flight is in a single or dual-seat series.

2.3.2. Simulator Training. Simulator training will be used to augment local qualification training
to the maximum extent possible. If required by the MDS-specific attachments, simulator training
will be completed before beginning flying training. If a simulator training requirement is specified
but not practical, the DFO, may approve an instructor supervised cockpit familiarization that
stresses all normal and emergency procedures to include unique procedures normally accom-
plished in the aircraft.

2.3.3. Combat Edge Ground Training. All AFMC F-15/F-16 aircrew members will receive one
hour briefing on limitations, normal/emergency operations, and failure modes/appropriate correc-
tions. The initial training must be conducted by an aircrew or physiologist who has attended cadre
training at an authorized Physiological Training Center IAW AFI 11-404, *Centrifuge Training for
High-G Aircrew*. Unit Life Support Officers (LSO) will designate trained aircrew, who have flown
with the COMBAT EDGE ensemble, as trainers to facilitate future COMBAT EDGE training
requirements

2.4. Flying Training.

2.4.1. First Flight in a Single-Seat Aircraft. When the first training flight is carried out in a sin-
gle-seat aircraft, an instructor pilot (IP) qualified in the same aircraft must fly in and instruct from
a chase aircraft. In addition, an IP (qualified in the same aircraft and in radio contact with the stu-
dent) must observe landings from a position appropriate for observing the approach and landing.
When an instructor is not available for ground observation, the most qualified available pilot (cur-
rent in the same aircraft) must be used.

2.4.2. Combat Edge First Flight. The first flight by each F-15/F-16 aircrew member in which the
entire COMBAT EDGE ensemble is worn will include the following profile (prior to any high-G
maneuvering):

2.4.2.1. F-15: G warm-up to 4 G, and one 5-7 G 180° turn, and one 7-8 G 180° turn.

2.4.2.2. F-16: G warm-up to 4 G, and one 6-8 G 180° turn, and one 8-9 G 180° turn.

2.4.2.3. Upon completion of the flight phase of training, this one-time event will be docu-
mented in AFORMS.

2.4.3. Night Qualification Requirements

2.4.3.1. Night Checkout Sortie. This sortie is required for fighter/trainer category aircraft and
is normally flown prior to the flight evaluation with the following exception:

2.4.3.1.1. Pilots entered in phase I training will not accomplish required qualification
night events in a single-seat aircraft until after the phase I flight evaluation. An IP, in radio
contact with the trainee, will observe landings from a chase aircraft or a position appropri-
ate for observing the approach and landing.

2.4.3.2. Night Landing Training. Flying unit commanders may permit pilots in dual-seat aircraft to accomplish required qualification night events after the phase I flight evaluation. In this case, the IP will be in the same aircraft at a seat with a set of flight controls.

2.4.3.3. Pilots must complete the night qualification requirements within the time limits specified in paragraph **1.7.7.3.** If the night landings/night checkout sortie cannot be completed within the specified time limit, the flying unit commander may authorize extending the due date for this event. This authorization will include justification for the delay, prescribe a new due date and be filed in section 5 of the individual's training folder. Forward an information copy of this documentation to HQ AFMC/DOV. Unit qualification roster (letter of X's) will reflect the individual's "day only restriction". If the individual is to be designated "day only qualified" the AF Form 8 should also reflect this restriction.

2.4.4. Touch-and-Go Landing Training. If the unit allows mission/first pilots to perform touch-and-go landings, the unit will establish appropriate qualification training requirements, training restrictions, and designate selected airfields for mission/first pilot touch-and-go landings. For approved test programs requiring touch-and-go landings, the aircraft commander must be touch-and-go qualified, however, airfields need not be designated by the unit.

2.4.4.1. Touch-and-Go landing training must be performed as outlined in this instruction and the applicable MDS-specific attachments. This training may be incorporated in another unit developed lesson plan such as LAO training. Proficiency must be demonstrated to a current/ qualified IP and certification documented IAW this instruction, and filed in section one of the individual's training folder. Document completion of training on the AF Form 1381, **USAF Certificate of Aircrew Training**. Touch-and-go landing proficiency will be maintained IAW with **Table 8.**

2.4.4.2. Mission/first pilots, not qualified as an IP or EP, may accomplish touch-and-go landings under the following conditions:

2.4.4.2.1. Subject to operating procedures and restrictions contained in AFI 11-2FT, Volume 3.

2.4.4.2.2. Training completed and proficiency demonstrated to an instructor pilot.

2.4.4.2.3. Touch-and-go proficiency is maintained IAW **Table 8.** of this instruction.

2.4.5. Navigator Overwater Qualification. Those units with (or that support) missions requiring flight operations outside of continental United States (CONUS) NAVAID range will ensure navigator training, testing, and flight evaluation procedures incorporate events supporting navigator proficiency to perform this duty. Tailor these procedures to unit's aircraft navigation equipment capabilities. Those units with (or support missions) missions not requiring flight operations outside CONUS NAVAID coverage may tailor their navigator training, testing, and flight evaluation procedures accordingly. Navigator qualification flight evaluations at units, which tailor navigator procedures to CONUS-only operation, will annotate a restriction on the AF Form 8 as: "Restricted to CONUS-only navigation."

2.5. Requalification. Requalification training requirements are outlined in AFI 11-202 Volume 1, AFMC Supplement 1, paragraph 1.7, and the MDS-specific attachments of this instruction.

2.6. Conversion/Difference Qualification. Difference training is required when transitioning within (or between) series of the same mission/design aircraft (i.e., C-135E to C-135C; F-16C (PW Engines)

to F-16C (GE Engines)). Conversion training is required when differences within (or between) series of the same mission design aircraft (i.e., C-135E to KC-135R; F-15A-D to F-15E; T-38A to T-38C) are significant enough to warrant more in-depth training. See the applicable attachment to this instruction for MDS-specific guidance.

2.6.1. If differences between series of the same mission/design aircraft are significant enough to warrant conversion training units may conduct this training using AFMC prescribed conversion training. If conversion training is not established in AFI 11-2FT Volume 1, MDS-specific attachments and the unit deems conversion training necessary, submit a training plan to HQ AFMC/ DOV for approval.

2.6.2. Phase II qualified crewmembers completing conversion/difference training between series of the same mission/design aircraft do not need to reaccomplish phase II training, in the additional series, unless required by unit supplements to this instruction.

2.6.3. Instructors and flight examiners completing conversion/difference training between series of the same mission/design aircraft may be designated instructors and flight examiners in the new series unless restricted by unit directives.

2.7. Multiple Qualification. Flying wing commanders may authorize qualification in more than one MDS aircraft when mission requirements dictate and it is economically justified. HQ AFMC will authorize multiple qualification for units without a flying wing commander. See AFI 11-202 Volume 2, AFMC Supplement 1 for AFMC multiple qualification policy and procedures.

2.8. Senior Officer/Test Pilot Qualification . In cases where test pilots complete the ETCA senior officer qualification training course with a restricted AF Form 8, unit training office will develop a plan to remove these restrictions. This training will be developed using the AFMC prescribed initial qualification training plans. Transcribe formal training events accomplished at the ETCA senior officer qualification course on to the AFMC training forms. Required training will be the incomplete training events remaining on the AFMC training forms. Submit the training plan to the squadron commander for approval. Document this approval in the individual's training folder. A flight evaluation is not required unless directed by the squadron commander. See AFI 11-202 Volume 2, AFMC Sup 1 for guidance on removing this restriction from the AF Form 8.

2.9. Flight Surgeons Qualification. Flight surgeons will comply with requirements in AFI 11-202 Volume 1, paragraph 2.9 and paragraph **4.** of this instruction. Units will designate one aircraft as primary for Flight Surgeons who fly on more than one of the unit's assigned aircraft.

2.10. Aerial Photographer Qualification .

2.10.1. Unit commanders may authorize aerial photographers to perform airborne photographic duties in support of unit missions. This section outlines the minimum training required for military personnel in the 3V0XX Air Force Specialty Code (AFSC), Government Service personnel, and contractors to perform airborne photographic duties aboard ejection seat (rear cockpit) and non-ejection seat aircraft. Aerial photographers are classified IAW AFI 11-401, *Flight Management.*

2.10.2. Prerequisites. Prior to completing this training the trainee will complete the following:

2.10.2.1. Aircraft Qualification. Aerial Photographers will complete the applicable MDS-specific ground and flight training prior to receiving Aerial Photographer training outlined in this section. If this training is not specified in the MDS-specific attachments to this instruction,

units will develop training programs and include them in unit supplements to this instruction. An IP, IWSO, or IF, qualified in the respective aircraft, may conduct ground training. A minimum of one flight will be accomplished prior to beginning Aerial Photographer qualification training listed below. This flight is strictly a familiarization flight with no camera system.

2.10.3. Ground Training Requirements. An instructor pilot qualified in the respective aircraft will conduct this ground training. If a representative aircraft is unavailable a cockpit trainer may be substituted. Trainee will wear all applicable flight gear and have a representative camera system for use in this training. In addition to training specified by MDS-specific attachments Aerial Photographer training will include, as a minimum, the following:

2.10.3.1. Cockpit familiarization.

2.10.3.1.1. Explanation of aircraft controls, gauges, switches and checklist pre-flight items.

2.10.3.1.2. Familiarization with proper life support equipment connections.

2.10.3.1.3. Demonstration of equipment stowage. Equipment should be small enough to operate and stow quickly without interfering with flight controls or throttle(s). Straps, lens caps, etc. should be removed before flight.

2.10.3.1.4. Discussion of any restrictions associated with aerial photography in the applicable aircraft (e.g. limited space in a fighter cockpit).

2.10.3.2. Emergency procedures. Emergency procedures training should include ground egress, bailout, ejection procedures with equipment in cockpit, and BOLD FACE/CAPS as applicable.

2.10.3.3. Normal Procedures. Normal procedures training should include chase positioning and crew coordination terminology (e.g. up-down-forward-aft-in-out). Crew duties take priority over photographer duties. Include photographer specific training to include the importance of sun angles, canopy reflection's and problems associated with a zoom lens.

2.10.3.4. Mission requirements associated with photo chase sortie (e.g. weapons separation, CFP, Loads and Flutter, Public Relations support). Review past chase mission footage and proof sheets with trainee. Make sure trainee fully understands the indispensable data they are responsible for on photo chase missions. Define a "photo desired," and "photo required" mission.

2.10.3.5. Equipment training will include practicing photography shooting skills on ground with each camera to ensure thorough familiarization prior to first flight.

2.10.3.6. Document completion of ground training on the applicable portion of the AFMC Form 67A8, Aerial Photographer Qualification. This will certify trainee is ready for first sortie with a camera.

2.10.4. Flying Training Requirements. Aerial photography flight training qualifies the photographer to carry cameras and associated equipment. Only cameras and associated gear that have been approved IAW AFI 11-202 Volume 3, may be used on board aircraft. Flying training is required only for fighter/trainer aircraft. This training should simulate a typical profile the crewmember will be required to fly. It will be flown as a dedicated two-ship under day VMC. A Photo/Safety

Chase qualified instructor pilot will conduct all flying training. Document training on the AFMC Form 68A7, Aerial Photographer Qualification

2.10.4.1. Complete all MDS-specific ground and flying training requirements and Aerial Photographer Qualification ground training. The instructor pilot signature on the AFMC Form 67A7 signifies that all training has been completed and the chief photographer has approved individual to begin flying training.

2.10.4.2. Due to limited space and safety considerations, do not take more than 2 camera systems in fighter/trainer aircraft without prior approval from the DFO. In addition, photographers may not carry more than one camera until the photographer is familiar and comfortable operating in a flying environment. Document this on the AFMC Form 68A7 and associated AFMC Form 69. Annotate any restrictions on the applicable qualification roster (letter of Xs).

2.10.4.3. Flying training should begin using simplest camera system and should include a representative sample of missions requiring photographic support. Ensure that crews perform intercockpit communication, radio calls and equipment management as would be completed during an actual test mission. Ensure mission data is reviewed after each mission and give the trainee feedback.

2.10.4.4. Once competency is demonstrated competency during an airborne training mission the aerial photographer will be cleared for "photo desired" missions only. Training officer will clear aerial photographer for "photo required" missions based on proficiency, experience and instructor pilot/chief photographer concurrence. Document this on the AFMC Form 68A7 and associated AFMC Form 69. Annotate any restrictions on the applicable qualification roster (letter of Xs).

2.11. AFMC Specialized Training.

2.11.1. Qualitative and Short Term Evaluations. Test pilots, test navigators, flight test engineers, and Test Pilot School students may perform short-term evaluations of aircraft without completing AFI 11-202 series Phase I qualification training if the DFO approves the flight and the following criteria are met:

2.11.1.1. Test pilots may evaluate dual-controlled aircraft if a qualified instructor pilot is at the other set of controls.

2.11.1.2. Test pilots may fly single-place aircraft if a dual controlled model is not available and they are current in a similar type of aircraft (as described in AFI 11-202V2/ AFMC Sup 1). An instructor pilot current in the aircraft being evaluated must be in a chase aircraft. Within 30 days before the flight, the evaluating test pilot will complete:

2.11.1.2.1. Qualification open and closed book written tests.

2.11.1.2.2. AFI 11-2FT Volume 1 MDS-specific attachments Phase I ground training. DFOs may determine the extent of training given on local area procedures and on aircraft systems that will not be used on the flight(s).

2.11.1.2.3. A simulator training course or at least one hour of supervised cockpit time if the simulator training is not available.

2.11.1.2.4. A preflight briefing that includes an oral evaluation of the normal and emergency procedures for the aircraft.

2.11.1.3. Flying unit commanders will review the flight profiles of single-place aircraft and make sure sound safety principles are followed. Flying unit commanders will make sure all flights are thoroughly planned, flown as briefed, and monitored.

2.11.1.4. Flight test navigators and engineers may evaluate aircraft if:

2.11.1.4.1. A qualified pilot flies the aircraft.

2.11.1.4.2. They complete ground training for non-qualified personnel IAW paragraph **4.13.**

2.11.1.5. USAFTPS students may perform aircraft evaluations according to the school curriculum. Test Pilot School student pilots may make takeoffs and landings and occupy either seat when performing qualitative or short-term evaluation flights in AFMC helicopters. A qualified helicopter instructor pilot will be in command and be in a seat with a set of flight controls.

2.11.2. Limited Qualification Status. Limited qualification status is for crewmembers who cannot meet the training requirements of this instruction and MDS-specific attachments because of mission requirements or aircraft limitations. The following rules apply to this qualification status:

2.11.2.1. Use of this status is restricted to crewmembers in particular test programs, crewmembers in units without assigned aircraft, to multiple qualified pilots (who must maintain full qualification in their primary aircraft), and to USAF TPS instructors. DFOs must ensure sufficient capability is retained to fly unit aircraft during contingencies or unusual circumstances. Do not use this status to solve problems caused by a temporary shortage of aircraft or flying hours. Personnel in limited qualification status must take care to perform in-flight duties only under conditions for which they are trained and current (for example; day only, VMC only).

2.11.2.2. Personnel in this status will fly the aircraft on the assigned mission only. Only mission-essential personnel will be on the aircraft.

2.11.2.3. All training will be conducted IAW this instruction and the applicable MDS-specific attachments with the following exception:

2.11.2.3.1. Personnel only need flying training in the areas they will use. For example, a pilot who has a limited qualification in the F-16 and is restricted to non-formation, day, and VMC would only need the familiarization sorties during initial qualification training. Continuation training and currency would consist of sorties and landings only.

2.11.2.4. Full qualification may be acquired by completing all the training requirements of this instruction and applicable MDS-specific attachments. Do not use limited qualification as an intermediate qualification level leading to initial qualification.

3. MISSION QUALIFICATION TRAINING (PHASE II).

3.1. General. In addition to the training guidance outlined in AFI 11-202, Volume 1 as supplemented, use this instruction when completing mission qualification training in AFMC. Units will establish mission ground and flying training requirements for those aircraft, missions, and crewmembers (to include mission and operational support crew) not addressed in this instruction. Document this training in unit supplements to AFI 11-2FT Volume 1 using AFMC Forms 67 and 68. Phase II mission training may include, but is not limited to, the following areas: aerial demonstration, air refueling, airdrop, chase, executive airlift, flight test orientation/techniques, formation, flutter, functional check flight, intercept, low-level navigation, and weapons delivery.

3.2. Ground and Flying Training Requirements . Units developed training will specify mission ground and flying training requirements that identify tasks and required proficiency levels. Simulator requirements, based on availability and applicability, will be included in the unit developed programs. Use the AFMC Form 68 to document simulator training. When structuring programs, flying units will ensure that mission operational and training areas are compatible.

3.3. Air Refueling Qualification (Tanker and Receiver) Training.

3.3.1. Aircrew will follow the procedures in current USAF and lead MAJCOM refueling directives, applicable technical orders, and the appropriate MDS-specific attachments.

3.3.2. Air Refueling (Tanker or Receiver) training may be accomplished in conjunction with Phase I or instructor training.

3.4. Functional Check Flight (FCF) Qualification Training.

3.4.1. Crewmembers possessing the best qualifications, as determined by the squadron commander, will accomplish check flights. To become a functional check flight pilot, navigator, flight engineer, boom operator, or loadmaster, the individual must comply with the flying time minimums in **Table 4.** HQ AFMC/DOV evaluators are authorized to fly on initial FCFs to evaluate crew performance during higher HQ directed formal inspections and evaluations.

3.4.2. FCF Training Restrictions. Prior to performing aircrew duties on an initial FCF, each crewmember must have completed FCF mission qualification training.

3.4.2.1. A crewmember may fly an initial FCF without completing the FCF mission qualification training under the following conditions:

3.4.2.1.1. The individual must demonstrate basic competency in all phases of the FCF mission prior to conducting an initial FCF. Basic competency will be accomplished in-flight in an airworthy aircraft. An AFMC approved simulator may be used to establish this competency for dual-controlled aircraft. The phrase "has demonstrated basic competency in FCF procedures." will be documented in block 6 of the AFMC Form 69.

3.4.2.1.2. Additional flights required for mission qualification must be accomplished under the supervision of a mission-qualified instructor of like specialty.

3.4.2.1.3. AFMC waives the T.O.1-1-300 requirement that all crewmembers be FCF qualified in their assigned crew positions if the provisions in paragraphs **3.4.2.1.** and **3.4.2.2.** are met.

3.4.2.2. For single-seat aircraft, all training will be briefed, chased, and debriefed with an

FCF-qualified instructor pilot current in the same type aircraft.

3.4.3. If the AFI 11-2FT Volume 1 MDS-specific attachments do not contain training plans and associated requirements for FCF mission qualification, the unit will develop FCF training guidance and submit to HQ AFMC/DOV for approval. This guidance will be included in a unit supplement to this instruction.

Table 4. Flying Hour Prerequisites for FCF Aircrew.

AIRCRAFT	CREW POSITION	MINIMUM TOTAL FLYING HOURS	HOURS IN BASIC DESIGN AIRCRAFT (1,2)
Fighter/Trainer	MP	750 (fighter/trainer)	200
	MN/MW	750 (fighter/trainer)	100
Bomber/Cargo/ Reconnaissance	MP	1000	200 (4)
	MN/MW/MR(3)	1000	100
	MB	1000	200
	ML	1000	200
	MF	1000	200
Helicopter	MP/MF	500	300

NOTES:

1. Only primary and secondary time is applicable towards "HOURS IN BASIC DESIGN AIRCRAFT" category.

2. Refers to aircraft groups in applicable MDS-specific volumes, i.e., C-18, E-3, and E-8 are considered the same basic design aircraft

3. For navigators: C-135 and B-707 (C-18, E-3, and E-8) are considered same basic design aircraft.

4. For U-2 pilots: 300 hours is required.

3.5. Low Level Navigation Qualification. This training is designed to build aircrew confidence in the low altitude environment. Low-level navigation training qualifies aircrew to operate below 2000 feet AGL (300 feet AGL for helicopters) on standard military training routes or low altitude tactical navigation. Low Level Navigation training will be accomplished IAW with this section and MDS-specific attachments as applicable. All training will be conducted using HQ AFMC prescribed or approved training plans. Unit specific training requirements and restrictions will be specified in unit supplements to this instruction.

3.6. Chase Mission Qualification.

3.6.1. Chase mission training will be developed to support established unit test missions. Ground and flying training will be tailored to address specific chase article categories (i.e., aircraft,

weapon, decoys, drones, etc.) and activities associated with that category (i.e. photo, safety, area, spin, etc.). Training programs supporting this requirement may be treated as separate entities or grouped under and overarching chase qualification, however, all programs will as a minimum include:

    3.6.1.1. USAF, AFMC and local operations procedures and restrictions.

    3.6.1.2. Chase procedures to include aircraft/weapon/test item restrictions; set ups and rejoins; deconfliction with weapons/other aircraft; knock it off, terminate, and abort procedures; aircraft flight, weapon, and/or test item delivery parameters.

    3.6.1.3. Chase familiarization to include aircraft/weapon profiles, high/low speed flight characteristics, and aircraft limitations/differences, and weapon failure modes.

    3.6.1.4. Chase profile review to include takeoff, airborne pickup, chase positioning, formation, High "G" maneuvers/turns, approach and landing

    3.6.1.5. Safety considerations to include crew coordination, abnormal/emergency procedures, clearing, situational awareness, CRM, mission priorities.

3.7. Low Altitude Step Down Training (LASDT).

3.7.1. LASDT is used to qualify designated pilots for flight in the low altitude environment (below 500 feet AGL) without terrain following radar. LASDT will be used to support test plans requiring low altitude operations. Low Altitude Step Down Training (LASDT) will be accomplished IAW with this section and MDS-specific attachments as applicable. All training will be conducted using HQ AFMC prescribed or approved training plans. Unit specific training requirements and restrictions will be specified in unit supplements to this instruction.

3.7.2. Flight Training Requirements and Restrictions. Flight training will be conducted by IPs qualified below 500 feet AGL. In-flight instruction will consist of a minimum of one dedicated (front seat for fighter) sortie with a LASDT instructor (in the rear cockpit or in a chase aircraft for fighter as applicable). Minimum altitude for LASDT mission training events without terrain following radar (TFR) is 200 feet AGL. Minimum altitude for LASDT mission training events using TFR is 100 feet AGL. Exceptions are authorized if part of an approved test plan. Initial training is not allowed without a functional radar altimeter.

3.7.3. Instructor Requirements. LASDT-qualified aircrew upgrading to instructor status, instructor upgrade training will be conducted with the upgrading instructor conducting the ground training and instructing from the rear seat, if applicable.

3.8. Weapons Delivery Training .

3.8.1. Weapons Delivery training is used to qualify designated pilots to a level of proficiency in achieving specified weapon delivery parameters and acceptable accuracy. Weapons Delivery training will be used to train aircrew to perform weapons delivery in support of test programs requiring such operations. Weapons Delivery training will be accomplished IAW with this section and MDS-specific attachments as applicable. All training will be conducted using HQ AFMC prescribed or approved training plans. Unit specific training requirements and restrictions will be specified in unit supplements to this instruction.

3.8.2. Aircrew must have completed and be current in LASDT prior to conducting air-to-ground delivery training where delivery or recovery altitudes will be less than 500 feet AGL.

3.8.3. Flight Training Requirements and Restrictions. This training will be accomplished to the maximum extent possible at an ETCA formal training course. Local flight training will be conducted by an instructor current/qualified in Weapons Delivery.

3.8.3.1. Instructor will supervise the first sortie from the rear cockpit. Flying unit commander may authorize instructors to supervise from a chase aircraft.

3.8.3.2. Actual weapons release will be planned for this training. However, if release is not accomplished (hung ordnance, bad weather, etc.), the instructor, with flying unit commander approval, may determine that sufficient events have been accomplished to certify the sortie as complete if an actual weapons release was not achieved

3.8.3.3. For multiple-qualified pilots, a separate qualification is required for each aircraft MDS. However, currency may be updated in any aircraft in which qualified.

3.8.3.4. Aircrew with previous Air-to-Ground Weapons Delivery experience may use requalification requirements if authorized by the flying unit commander

3.9. Night Vision Goggle (NVG) Training. This training qualifies aircrews to conduct night flight operations using NVGs. NVG qualification training will be developed and tailored to specific aircraft and associated mission requirements. Local training programs will be developed IAW paragraph **1.7.2.** using formal school courseware to the maximum extent possible. Training programs will incorporate the step-down process where altitudes and illumination requirements are commensurate with the experience level of the trainee. Minimum experience required for NVG qualification/upgrade is specified in MDS-specific attachments as applicable.

3.10. Flight Test Training . This training orients aircrew on the instrumentation, flight test procedures/profiles, and Class II modifications used by test aircraft or aircraft modified for testing prior to performing actual test missions. Flight Test training will be accomplished IAW with this section and MDS-specific attachments as applicable. All training will be conducted using HQ AFMC prescribed or approved training plans. Unit specific training requirements and restrictions will be specified in unit supplements to this instruction.

3.10.1. Any supervisor (commander, operations officer, or branch chief) or instructor qualified in that mission may complete the applicable ground training. Flight training, if specified, will be conducted by an instructor qualified in the Flight Test mission.

4. CONTINUATION TRAINING (PHASE III).

4.1. General. In addition to the continuation training guidance outlined in AFI 11-202 Volume 1 as supplemented, follow the guidance outlined in this instruction when qualified in AFMC aircraft.

4.1.1. Applicable aircrew training (i.e. air refueling contacts, rendezvous, etc.) accomplished during in-unit training establishes currency due dates for subsequent continuation training.

4.2. Minimum Aircrew Requirements. Table 5. is provided as a management aid in consolidating recurring aircrew requirements. The applicable directive highlighted by ( ) takes precedence over this table and must be consulted for further information concerning requirements and applicability. This table doesn't relieve aircrew members from accomplishing additional training required by referenced or other directives. These are the minimum ground training requirements for unit AFORMS products.

Table 5. RECURRING AIRCREW REQUIREMENTS SUMMARY.

Event Description (Directive)	Aircrew Position ID (1)
Every 5 Years USAF Physiological Training (AFI 11-403, AFI 11-202 VOLUME 1)	See AFI 11-403 for guidance
Every 3 Years Water Survival Training (AFI 11-301) (Within 90 days of placement on flying status) (Note 2)	All
Low Threat Combat Survival Training (AFI 11-301) (Within 90 days of placement on flying status) (Note 2)	All
Recurring CRM Academics (AFI 11-290)	All (Note 5)
Every 17 Months (No due dates in AFORMS) Instrument Refresher Course (AFI 11-202 Volume 2)	P,C,W,E
Written Instrument Exam (AFI 11-202 Volume 2)	P,C,W,E
Written Qualification Exam – Closed Book (AFI 11-202 Volume 2)	All
Written Qualification Exam – Open Book (AFI 11-202 Volume 2)	All except S,H,J,A,Z,D
Publications Check (AFI 11-202 Volume 2)	All (Note 5)
Emergency Procedures Evaluation (AFI 11-202 Volume 2)	All (Note 5)
Navigator Instrument or Systems Refresher Course (AFI 11-202 Volume 2)	N,R
Navigator Instrument or Systems Refresher Exam (AFI 11-202 Volume 2)	N,R

Every 12 Months	
Flight Physical Examination (AFMAN 48-123)	All
Flight Records Review (AFI 11-401)	All
Anti-hijack Training (AFI 13-207)	All (Note 3)
CRM Exercise (AFI 11-290)	All (Note 5)
Aircraft Egress Training (AFI 11-301) (Prior to first flight)	All
Life Support Equipment Training (AFI 11-301) (Within 60 days of placement on flying status)	All
Hanging Harness Training (AFI 11-301) (Within 60 days of placement on flying status)	All (Note 4)
Aircraft Simulator Refresher Training (Paragraph 1.9.5.)	P,C,N,W,F
Each Semiannual Training Period	
Aircraft Systems Refresher Training (Paragraph 4.4.4.)	All except S,H,J,A,Z,D
Upon PCS Inbound	
Aircraft Portable and Fixed Fire Extinguisher Training (AFOSH Std 127-56) (Within 90 days of arrival)	All
Aircraft Marshaling Exam (AFI 11-218) (Within 30 days of arrival)	P,C,N,W,L,F,B
Local Area Survival Training (Prior to first flight)	All

NOTES:

1. Units will use standard aircrew position identifiers in **Table 6.**

2. DFO may waive this requirement to: Within 180 days of placement on flight status, provided crewmember has accomplished HQ AFMC/DOV approved academic phase of training.

3. All crewmembers whose aircraft frequently carry passengers.

4. All crewmembers who frequently perform duties on parachute equipped aircraft or perform missions requiring parachutes.

5. Plus any designated by the DFO.

Table 6. Aircrew Position Identifiers.

A	Other Aircrew Member	N	Navigator
B	Boom Operator	O	Air Battle Manager
C	Copilot	P	Pilot
D	Parachutist	R	Navigator-Bombardier or OSO
E	Electronic Warfare Officer or DSO	S	Flight Surgeon
F	Flight Engineer	T	Flight Attendant
H	Flight Nurse	U	UAV Operator
J	Pararescue Member	W	Weapon System Officer
K	Communications System Operator	Z	Operational Support or Battle Staff
L	Loadmaster		

4.3. AFORMS Standards. Aircrew members' continuation and additional training requirements will be managed IAW AFI 11-202 Volume 1 and this instruction. **Attachment 2** prescribes AFMC standard AFORMS event descriptions/identifiers, and standard aircraft codes.

4.3.1. For unit unique training use standard (2) event alpha character and number "20" or higher number to create an event for flying training. (example: weapons event – wd23; air event - ac44.)

4.3.2. Unique training use first character + "x" and two (2) numerical characters to create an event for like ground training events. (example: AX11; GX12.)

4.3.3. For units who track ancillary training in AFORMS:

4.3.3.1. Use "XA" and two (2) numerical characters for ancillary training events. (example: COMSEC - XA14; XA15.)

4.3.3.2. Use "XM" and two (2) numerical characters for mobility training events. (example: DP-CWD - XM11; XM12.)

4.4. Currency and Proficiency Requirements. Crewmembers will maintain flying currency and proficiency in their assigned aircraft and crew position by accomplishing the requirements outlined in **Table 7.** (basic currency requirements) and (basic proficiency requirements).

4.4.1. Basic Currency. **Table 7.** outlines AFMC basic currency requirements by crew position. Aircrew who are non-current for any requirement listed in **Table 7.** will not perform aircrew duties unless under the supervision of an instructor with the following exception:

4.4.1.1. Pilots who are non-current for an instrument approach will not fly under IFR or in IMC without an instructor. For multiple qualified aircrew, this only applies to the aircraft in which currency was lost.

4.4.2. The non-currency period begins when the aircrew member fails to accomplish the required events in the applicable time periods; i.e., the non-currency period for pilot landings begins 45 days after the last landing event. Aircrew will regain currency by accomplishing delinquent items under the supervision of an instructor

4.4.3. Basic Proficiency. **Table 8.** lists the AFMC basic proficiency requirements to be accomplished semi-annually by crew position. Events accomplished during phase I initial qualification

or re-qualification training will not be credited toward these requirements except those accomplished on successful phase I evaluation. Training events accomplished during conversion/difference training can be credited toward basic proficiency flying requirements. After successful completion of phase I qualification, training events accomplished during phase II training may be credited toward basic currency and proficiency requirements. Flying units will establish procedures so commanders and supervisors can monitor crewmember progress toward accomplishing an approximately proportionate share of proficiency requirements. Proficiency requirements, to the maximum extent possible, should be accomplished uniformly throughout the semiannual training period.

Table 7. Basic Currency Requirements.

Position	Training Item	Number/Frequency
Pilot	Sortie	1/45
	Landing	1/45
	Instrument Approach	1/45
(General Officer)	Instrument Approach & Landing	1/30
WSO	Sortie	1/45
Navigator,OSO, EWO, DSO	Sortie	1/60
Nonrated Primary Aircrew	Sortie	1/60
Flight Surgeon	Sortie	1/60
Mission crewmembers (1) (ejection seat aircraft)	Sortie	1/60
Mission crewmembers (1) (non-ejection seat aircraft)	Sortie	As Determined by DFO
Operational Support Fliers (1)	Sortie	As Determined by DFO

NOTE:

1. See AFI 11-401 and the AFMC Supplement 1 for definitions of Mission Crew and Operational Support Fliers.

Table 8. Semiannual Basic Proficiency Training Requirements.

LINE	A Aircraft	B Position	C Training Item	D Months Available					
				6	5	4	3	2	1
				Number Required					
1	Bomber or Cargo (8)	Pilot	Sorties	12	10	8	6	4	2
			Precision Approaches (3) (4)	6	5	4	3	2	1
			Nonprecision Approaches (3) (4)	6	5	4	3	2	1
			Total Landings	12	10	8	6	4	2
			Night Landings (1)	2	2	2	1	1	1
			Takeoffs (either seat) (4)	6	5	4	3	2	1
			NDB Approach (7)	1	1	1	1	1	1
			Circling Approach	1	1	1	1	1	1
			Touch & Go Landings (5) (6)	4	4	3	2	1	1
		Navigator	Sorties	6	5	4	3	2	1
		Nonrated Primary Aircrew	Sorties	6	5	4	3	2	1
2	Fighter or Trainer	Pilot	Sorties	30	25	20	15	10	5
			Precision Approaches (3) (4)	9	8	6	5	3	2
			Nonprecision Approaches (3) (4)	9	8	6	5	3	2
			Total Landings	15	13	10	8	5	3
			Night Sorties	2	2	2	1	1	1
			Night Landings (1)	2	2	2	1	1	1
			NDB Approach (7)	1	1	1	1	1	1
			Circling Approach	1	1	1	1	1	1
		IP/MP	Touch & Go (5) (6)	4	4	3	2	1	1
		IP	Right or Rear Seat Landings	4	4	3	2	1	1
		WSO, EWO	Sorties	20	17	13	10	7	3
			Night Sorties	2	2	2	1	1	1
3	Helicopter	Pilot	Sortie	18	15	12	9	6	3
			Precision Approaches (3) (4)	6	5	4	3	2	1
			Nonprecision Approaches (3) (4)	6	5	4	3	2	1
			Total Landings	18	15	12	9	6	3
			Night Sorties	2	2	2	1	1	1
			Night Landings (1)	2	2	2	1	1	1
			Takeoffs	18	15	12	9	6	3
			NDB Approach (7)	1	1	1	1	1	1
			Circling Approach	1	1	1	1	1	1
		Nonrated Primary Aircrew	Sortie	18	15	12	9	6	3
			Night Sortie	2	2	2	1	1	1

L I N E	A	B	C	D					
	Aircraft	**Position**	**Training Item**	**Months Available**					
4	All Aircraft	Flight Surgeon	Sorties	6	5	4	3	2	1
			Night Sorties (2)	1	1	1	1	1	1

NOTES:

1. Pilots may credit a night landing for landings accomplished from 30 minutes after local official sunset to 30 minutes before local official sunrise.

2. Night sortie time requirements for flight surgeons will be IAW AFI 11-202, Volume 1.

3. In order to log an instrument approach, primary instrument or primary simulated instrument time must be logged on the AFTO Form 781.

4. Up to 50 percent of this requirement may be logged in a HQ AFMC/DOV approved simulator. See **Table 9.** for approved simulators.

5. A "touch & go" can be credited as both a takeoff and a landing.

6. The touch & go requirement for MP/FPs applies only to pilots trained and certified to perform touch & go landings.

7. This requirement only applies to pilots flying aircraft with operational NDB equipment installed.

8. For proficiency training event credit, categorize the T-39 in the bomber/cargo category.

4.4.4. Ground Training.

4.4.4.1. General. The training office will document ground training accomplished and maintain records for the current and previous semiannual training period. Retain the AFORMS individual training summary to meet this requirement.

4.4.4.2. Systems Refresher Training. Flying units will develop a training program that ensures crewmembers maintain familiarity with aircraft systems. As a minimum, this training will include aircraft systems, subsystems, components, and critical and non-critical emergency procedures. Crewmembers will complete a minimum of three training sessions throughout the semiannual training period. Annual aircraft simulator refresher training may be credited as one event toward this requirement.

4.4.4.3. Aircraft Simulator Refresher Training. Pilots, flight engineers, and navigators (if the simulator has a navigator position) must attend aircraft simulator refresher training at least once every 12 months. **Table 9.** lists AFMC approved simulators. If there is no simulator support formal or contractor supported for a particular MDS aircraft, simulator training is not required. If a crewmember is qualified in several series of the same mission design aircraft, simulator training is required in one series. An Air Reserve Force (ARF), contract, or another MAJCOM simulator may be used for simulator training.

4.4.4.3.1. If the DFO considers other MAJCOM lesson plans inappropriate, AFMC flying units will develop simulator lesson plans that complement their local missions. In con-

structing simulator lesson plans, emphasis should be placed on aircraft systems, emergency procedures training, and cockpit/crew resource management.

4.4.4.3.2. Failure to complete required simulator refresher training in the prescribed period is not grounding. Notify the DFO in writing with specific details including when simulator refresher training went overdue and the projected completion date. Notification will be routed through the appropriate training channels to the flying unit commander and intermediate level training offices.

Table 9. AFMC APPROVED SIMULATORS.

AIRCRAFT	SIMULATOR LOCATION
A-10	Davis Monthan AFB; Barksdale AFB
B-1	Dyess AFB; McConnell AFB; Ellsworth AFB
B-2	Whiteman AFB
B-52	Barksdale AFB; Minot AFB
B-707	Tinker AFB; Miami, FL – Pan Am; Fort Worth, TX – American Airlines
C-5	Altus AFB; Dover AFB; Travis AFB; Westover AFB
C-12	Fort Rucker
C-130	Dyess AFB; Kirtland AFB; Little Rock AFB; Pope AFB; Dobbins ARB; Hurlburt Field; Minneapolis – Flight Safety; McChord AFB
C-135	Altus AFB; Offutt AFB; Scott AFB; March ARB; McConnell AFB
C-17	Altus AFB; Charleston AFB; McChord AFB
C-141	Altus AFB; McGuire AFB; Wright-Pat AFB; March ARB
F-15	Tyndall AFB; Seymour-Johnson AFB; Kingsley Field
F-16	Luke AFB; Springfield ANGB
H-1	Kirtland AFB
H-53	Kirtland AFB
H-60	Kirtland AFB
T-38	Columbus AFB; Laughlin AFB; Randolph AFB; Sheppard AFB; Vance AFB

4.4.5. Flying Training.

4.4.5.1. Conversion/Difference Requirements. Unless otherwise directed by the applicable MDS-specific attachment or associated unit supplements, conversion/difference training is current as long as qualification is held for the mission/design aircraft in which training was accomplished. Conversion/difference training must be reaccomplished when crewmember's loss of currency results in an unqualified status. Training events accomplished during conversion/difference training can be credited towards basic proficiency flying requirements.

4.4.5.2. Night Sortie Credit. Authorized aircrew IAW AFI 11-401 paragraph 3.5.1. may credit a night sortie by logging a minimum of one half-hour (0.5) primary night time from 30 minutes after local official sunset to 30 minutes before local official sunrise. Night sorties may be credited toward the total sortie requirement.

4.4.5.3. Night Landing Credit. Pilots may credit a night landing for landings accomplished from 30 minutes after local official sunset to 30 minutes before local official sunrise.

4.4.5.4. Basic Sortie Credit. In order to log a sortie for currency, rated aircrew must log secondary, primary, or instructor time. Navigators may log a sortie for currency if they log evaluator time. Pilots may also log a sortie for currency when evaluating if they log evaluator time, occupy a mandatory pilot position, and perform the crew duties associated with that position.

4.4.5.5. Navigator Requirements.

4.4.5.5.1. Flying units will establish continuation flying training requirements for grid navigation if the unit's mission requires navigation in latitudes greater than 70 degrees north or 70 degrees south. (N/A if unit aircraft are not equipped for grid navigation)

4.4.5.5.2. Additionally, flying units must ensure continuation training supports over-water navigator proficiency training.

4.4.5.6. Flight Engineer Requirements.

4.4.5.6.1. Currency Sortie. The individual must perform the "primary" flight engineer duties which include accomplishment of the preflight and all normal checklists (exception: cruise check) required for flight.

4.4.5.6.1.1. The "primary" flight engineer is defined as the single individual that occupies the flight engineer station. Additional flight engineers required for mission duties are not considered as "primary" duties for crediting a currency sortie.

4.4.5.6.2. Proficiency Sortie. This sortie requirement may be collectively met by the following conditions:

4.4.5.6.2.1. Accomplishment of a currency sortie.

4.4.5.6.2.2. Accomplishment of the duties required of the other flight engineer (scanner crew position) on aircraft requiring two flight engineers. (minimum crew as defined in the applicable flight manual). Duties must include preflight and accomplishment of procedures as specified in the flight manual.

4.4.5.6.2.3. Accomplishment of duties as the "primary" flight engineer when the flight begins with an engine running crew change (ERCC).

4.4.5.6.2.4. Accomplishment as an instructor/evaluator when instructing/evaluating an individual at the primary flight engineer position. (Instructing an individual in scanner duties does not meet this requirement.)

4.4.5.7. Loadmaster Requirements.

4.4.5.7.1. Currency Sortie. The individual must perform the flight manual required preflight, flight, and postflight, as well as accomplish those duties required for aircraft on/off loading or aerial delivery of cargo or personnel.

4.4.5.7.2. Proficiency Sortie. This sortie requirement may be met by either:

4.4.5.7.2.1. Accomplishment of a currency sortie.

4.4.5.7.2.2. Completion of flight manual required loadmaster duties in flight.

4.4.5.7.2.3. Instructing or evaluating an individual conducting loadmaster duties in flight.

4.4.5.8. Boom Operator Sortie Credit. The individual must accomplish, instruct, or evaluate the flight manual required duties, to include preflight, postflight, and inflight operation of the aerial refueling device (A/R boom or hose drogue).

4.4.6. Mission Currency/Proficiency Requirements. In supplements to AFI 11-2FT Volume 1, flying units will identify specific ground and flying continuation training requirements necessary to ensure mission readiness. In the absence of AFMC guidance, the unit commander will determine which training is needed for aircrew members to regain mission currency/proficiency when established mission requirements are not met. If all qualified instructors have lost currency in a mission event, the flying unit commander will request support of a current instructor from another AFMC unit or the lead command. In the absence of such support DFOs may select instructors to regain currency without supervision using a HQ AFMC approved training plan.

4.4.6.1. Air Refueling Requirements.

4.4.6.1.1. Unless otherwise directed by AFI 11-2FT Volume 1 MDS-specific attachments, to stay current in air refueling (tanker or receiver), pilots must complete at least one refueling (day or night) every 180 days. Multiple qualified pilots must accomplish at least one refueling every 180 days in each applicable aircraft. Refueling from either seat may be credited toward these requirements.

4.4.6.1.2. To regain air refueling currency, a pilot will accomplish at least one in-flight contact under the supervision of a current air refueling (tanker or receiver, as appropriate) qualified instructor pilot.

4.4.6.1.3. Each receiver pilot scheduled to fly a preplanned overseas deployment, which includes air refueling, will accomplish a refueling event within the 90-day period before the scheduled deployment date. This refueling should be done in the same type of aircraft that is scheduled for the deployment and will include night contacts if there are any planned night refuelings. If possible, the tanker that is scheduled for this practice refueling should be the same type that is planned for the deployment

4.4.6.1.4. Boom operators must accomplish an actual in-flight operation that includes a refueling device contact once every 60 days. Accomplish re-currency training according to paragraph **4.4.2.**

4.4.6.1.5. Other primary aircrew refueling currency and proficiency requirements should be established in flying unit supplements to the appropriate AFI 11-2FT Volume 1 MDS-specific attachments.

4.4.6.2. FCF Requirements. Unless otherwise directed by AFI 11-2FT Volume 1 MDS-specific attachments, to stay current in the FCF mission, crew members must complete at least one complete FCF sortie/profile every 180 days. Units may update FCF currency by completing only part of the FCF if more restrictive currency and the minimum required events are

specified in a unit supplement to this instruction.

4.4.6.3. Low Level Navigation Requirements. Currency/proficiency requirements will be specified, as applicable, in AFI 11-2FT Volume 1, MDS-specific attachments or unit supplements to this instruction.

4.4.6.4. Chase Requirements. Unless otherwise directed by AFI 11-2FT Volume 1 MDS-specific attachments pilots must complete at least one chase event (photo/safety) every 180 days. Units will specify additional chase mission currency/proficiency requirements to support established test missions. As a minimum, pilots will only log chase events when they fly their primary mission as chase.

> 4.4.6.4.1. Chase currency may be updated by flying:
>
> > 4.4.6.4.1.1. A dedicated chase test support 0-5 mission acting as photo chase, flutter/CFP chase, safety chase, weapons separation chase, and chasing test article after release.
> >
> > 4.4.6.4.1.2. A dedicated 0-6 chase training mission can also be used to log a chase event where events flown should be similar to the initial chase upgrade sortie.
> >
> > 4.4.6.4.1.3. Exception: SEFEs may log a chase event while chasing during an instrument/qualification checkride.
>
> 4.4.6.4.2. A pilot who exceeds the Chase currency requirement will regain currency by performing a chase event (described above) under the supervision of a Chase IP. MDS-specific procedures and restrictions for Chase are outlined in the applicable attachment to this instruction.

4.4.6.5. LASDT Requirements. Unless otherwise directed by AFI 11-2FT Volume 1 MDS-specific attachments, to stay current in LASDT pilots must complete at least one LASDT event every 90 days.

> 4.4.6.5.1. LASDT currency may be updated by a flying a minimum of 10 minutes of flight below 500' AGL. The 10 minutes need not be continuous but should allow sufficient time to experience and operate in the low altitude environment. This flight should be conducted along a preplanned route/flyby line in restricted airspace.
>
> 4.4.6.5.2. A pilot who exceeds currency requirement will regain currency by performing a LASDT event (described above) under the supervision of a LASDT IP. MDS-specific procedures and restrictions for LASDT are outlined in the applicable attachment to this instruction.

4.4.6.6. Weapons Delivery Requirements. Unless otherwise directed by AFI 11-2FT Volume 1 MDS-specific attachments, to stay current in Weapons Delivery crew members must complete at least one Weapon Delivery event every 180 days.

> 4.4.6.6.1. A pilot who exceeds currency requirement will regain currency by performing a weapons delivery under the supervision of an instructor qualified in Weapons Delivery. MDS-specific procedures and restrictions for Weapons Delivery are outlined in the applicable attachment to this instruction.

4.4.6.7. NVG Requirements. Aircrew will maintain NVG currency IAW AFI 11-2FT Volume 1 MDS-specific attachments. Aircrew who exceed currency requirements will regain currency IAW AFI 11-2FT Volume 1, MDS-specific attachments.

4.5. Proration of Training. When determining training requirements, prorate an aircrew member not available for flying duties IAW AFI 11-202 Volume 1 and this paragraph. The following guidance applies:

4.5.1. All aircrew must complete a proportionate share of training requirements outlined in **Table 8.** starting with the first day of the month after the qualification flight evaluation.

4.5.2. Crewmembers are not considered available for training if they are absent for more than 15 consecutive days because of one of the following or a combination of the following: PCS move, non-flying TDY, duty not involving flying (DNIF), or emergency leave.

4.5.3. Flying units may reduce requirements when the cumulative total of periods that exceed 15 consecutive days of non-availability results in changing the months available according to the following table:

Table 10. Basic Proficiency Proration Chart.

Days Available	Months Available
166 through remaining days	6
136 through 165	5
106 through 135	4
76 through 105	3
46 through 75	2
16 through 45	1
0 through 15	0

4.6. Failure to Complete Continuation Training Requirements. Comply with guidance outlined in AFI 11-202 Volume 1, paragraph 4.6. Waiver authority for this paragraph is HQ AFMC/DOV

4.7. Requirements Before PCS of TDY by Members on Active Flying Status. Comply with guidance in AFI 11-202 Volume 1, paragraph 4.7, when determining training requirements for flying personnel departing PCS from their old station or TDY from their permanent station.

4.8. Requirements Before Removal From Active Flying. Comply with guidance in AFI 11-202 Volume 1, paragraph 4.8., when determining training requirements for flying personnel being retired, separated, placed in inactive status, or reassigned to non-flying positions.

4.9. Requirements While in Inactive Flying Status. Comply with guidance in AFI 11-202 Volume 1, paragraph 4.9., when determining training requirements for flying personnel being placed in inactive status.

4.10. Retraining. Flying personnel retraining in another mission/design aircraft will incur and ADSC IAW with AFI 11-202 Volume 1, paragraph 4.10 and AFI 36-2107.

4.11. Aircrews Flying in Non-US Air Force Aircraft and with Non-US Air Force Units. When determining training requirements for aircrews flying in Non-US Air Force Aircraft or with Non-US Air Force units comply with guidance in AFI 11-202 Volume 1, paragraph 4.11.

4.12. Flight Surgeon Proficiency/Currency Requirements. Flight surgeon training requirements will completed IAW AFI 11-202 Volume 1 and this paragraph. At least 50 percent of their annual training requirements will be accomplished in their primary aircraft. Their 60-day currency requirement may be accomplished in any unit assigned aircraft. If they exceed 60 days between sorties in an aircraft, they must accomplish requalification training before flight.

4.12.1. Flight Surgeon Re-qualification Training. Flight surgeons exceeding the 60 days currency in an aircraft will accomplish a flight in the aircraft to regain currency. Prior to the flight, the flight surgeon will accomplish the following:

4.12.1.1. Bomber, Cargo, or helicopter. A written egress examination and shipside egress.

4.12.1.2. Fighter or Trainer. A written examination encompassing cockpit familiarization and egress knowledge, ship-side egress training, and a cockpit familiarization briefing given by a qualified pilot at the aircraft.

4.13. Nonqualified Personnel Requirements.

4.13.1. Personnel who fly in an AFMC aircraft, in which they are not qualified, at a crew position with a set of flight controls will complete AFMC Form 67A1, **Prerequisites and Ground Training for Nonqualified Personnel**. This requirement does not apply to crewmembers in initial qualification or re-qualification training. A trainee signature is not necessary on the AFMC Form 67A1 when training is given to nonqualified VIP personnel. If an instructor is unavailable to accomplish items 2, 3, 4, and 5, then the aircrew member primarily responsible for the position being occupied may accomplish and sign off this training. Qualified helicopter engineers occupying the left seat need not accomplish this training.

4.13.2. Training is valid for 30 days if all prerequisites on the AFMC Form 67A1 are current. File the record of completed training with the appropriate flight authorization for 1 year.

4.14. Multiple Qualification Requirements.

4.14.1. The DFO will designate one aircraft as primary for crewmembers that maintain qualification in more than one of the unit's mission/design aircraft. Exceptions to this requirement are identified in MDS-specific attachments. See AFI 11-202 Volume 2/AFMCS 1 for AFMC multiple qualification policy.

4.14.2. Currency Requirements. Requirements in **Table 7.** will be performed in each aircraft in which the crewmember is qualified. The following exception applies:

4.14.2.1. The instrument approach required of pilots every 45 days may be performed in any similar aircraft, as specified in AFI 11-202 Volume 2, AFMC Supplement 1, in which the pilot is qualified.

4.14.3. Proficiency Requirements. At least 50 percent of the proficiency flying requirements in **Table 8.** must be performed in all aircraft in which an individual is qualified. However, the total basic proficiency flying event requirements must not be less than aircraft qualification requiring the most sorties.

4.14.3.1. Navigators dual qualified in both the OSO and DSO positions in the B-1 will perform at least 50 percent of the basic proficiency sortie requirements in the OSO position.

4.14.4. Mission Requirements. Mission currency will be maintained in each aircraft in which currency is maintained unless specified in this instruction or unit supplements to this instruction. Units may invoke the 50 percent rule outlined in paragraph **4.14.3.** to accomplish mission proficiency requirements.

5. UPGRADE QUALIFICATION TRAINING.

5.1. General. In addition to the training guidance outlined in AFI 11-202 Volume 1, AFMC Supplement 1, use this instruction when completing upgrade qualification training in AFMC. All instructor upgrades will complete appropriate training as outlined in this paragraph and the MDS-specific attachments.

5.2. Copilot to First Pilot (Aircraft Commander) Upgrade . **Table 11.** outlines first pilot flying hour requirements for specified aircraft. The prerequisite flying time experience levels required for upgrade are based on the copilot having gained the knowledge and judgment required to effectively accomplish the unit's mission. This training will be accomplished via formal course or in-unit unless otherwise directed by MDS-specific attachments. Use formal courseware for in-unit upgrade training.

Table 11. Flying Hour Prerequisites for First Pilot Qualification.

AIRCRAFT	MINIMUM TOTAL FLYING HOURS	MINIMUM HOURS IN BASIC DESIGN AIRCRAFT (1)
BOMBER/CARGO	1500	None (2)
	750	100 (3)
	Less Than 750	Not eligible upgrade.
HELICOPTER	300	300

NOTES:

1. Only primary and secondary time is applicable towards "HOURS IN BASIC DESIGN AIRCRAFT" category.

2. Individual will have at least two sorties in the copilot position before designated aircraft commander.

3. Or 200 hours in any Bomber/Cargo aircraft (Multiengine jet or turboprop).

5.3. Instructor Upgrade . The squadron commander bases selection of instructors on the crewmember's experience, judgment, flying skill, technical knowledge, and airmanship. Minimum flying time experience requirements for upgrade to instructor for all aircrew specialties are outlined in **Table 12.** Flying time requirements may be waived by the DFO on a case by case basis.

5.3.1. Formal Training. Aircrew members who have never been instructor qualified will attend the lead MAJCOM instructor upgrade school. Aircrew members who have been instructor qualified in another type aircraft should attend the aircraft's lead MAJCOM formal school but may be upgraded locally with DFO's approval. DFOs may authorize instructor upgrade training in conjunction with re-qualification training. Document DFOs approvals in section five of the individual's training folder.

Table 12. Instructor Upgrade Flying Time Prerequisites.

AIRCRAFT	CREW POSITION	MINIMUM TOTAL FLYING HOURS (4)	MINIMUM HOURS IN BASIC DESIGN AIRCRAFT (1,2,4)
FIGHTER/TRAINER	Pilot	500 (5)	100
	WSO	500	100
BOMBER/CARGO (3)	Pilot	1500	200
		750	300
	Nav, OSO, DSO, EWO, FE, BO, LM	500	200
	Non-Primary	300	200
TILT ROTOR	Pilot	1500	200
HELICOPTER	Pilot	500	500
	Flight Engineer	500	500
U-2	Pilot	500	300 (6)

NOTES:

1. Only primary and secondary time is applicable towards "HOURS IN BASIC DESIGN AIRCRAFT" category.

2. There is no "HOURS IN BASIC DESIGN AIRCRAFT" requirement for new and experimental aircraft in AFMC. The DFO will designate an "initial cadre" of instructors and follow documentation guidance in AFI 11-202 Volume 2, AFMC Sup 1.

3. USAF TPS staff instructors require only 50 hours "HOURS IN BASIC DESIGN AIRCRAFT" to upgrade to instructor in the C-12 aircraft.

4. Flying time requirements may be waived by the DFO if added risk is determined acceptable. Document this waiver in section five of the training folder.

5. 200 hours of the 500 required will be in high performance fighter type aircraft.

6. 300 hours in the U-2R/S.

5.3.2. Ground Training. Prospective instructors must have knowledge of aircraft systems, procedures, and other areas in which instructional duties apply.

5.3.2.1. Instructor ground training will include, as a minimum, the AFMC Form 67A2, **Instructor Upgrade Ground Training**. AFI 11-2FT Volume 1 MDS-specific attachments may include additional instructor upgrade ground training.

5.3.2.2. Prospective instructors will be familiar with the proper forms and procedures for documenting student training, including the prerequisites and ground training for nonqualified personnel outlined on AFMC Form 67A1, **Non-qualified Personnel Ground Training**.

5.3.2.3. When accepting instructor status from another MAJCOM, an AFMC Form 67A2, **Instructor Upgrade Ground Training,** lesson plan must be accomplished to familiarize the crewmember with AFMC policy, instructions and regulations. The lesson plan will be completed prior to performing instructor duties and filed in section three of the crewmember's training folder.

5.3.3. Flying Training. Conduct instructor upgrade training in the crew position from which instruction will normally be performed. Instructor lessons will consist of demonstrations and practice of procedures and techniques used in accomplishing instructor duties. Lesson plans are established in AFI 11-2FT Volume 1 MDS-specific attachments. An instructor candidate will receive an instructor upgrade flight evaluation according to AFI 11-202 Volume 2/AFMCS 1. The instructor flight evaluation may be accomplished prior to completion of night training events but the individual will not perform instructor duties at night until completion of these events. See paragraph **2.4.3.3.** for guidance on authorizing an extension.

5.3.4. Instructor Requalification. When an instructor loses aircraft qualification as per AFI 11-202 Volume 1, paragraph **1.7.1.**, the flying unit commander will determine what instructor requalification training is required. When an instructor loses aircraft qualification as per AFI 11-202 Volume 1, paragraph **1.7.2.**, the instructor training syllabus, as established in AFI 11-2FT Volume 1 MDS-specific attachments, must be accomplished. In both cases, the requalification evaluation must include the instructor requirements.

5.3.5. Mission Instructor. An instructor qualified in the aircraft, crew position and mission will conduct mission training, unless otherwise directed by MDS-specific attachments. Instructors and flight examiners completing mission training may be designated/considered mission instructors upon completion of mission training unless restricted by MDS-specific attachments.

5.3.5.1. When qualified as an instructor, aircrew members will be considered instructor qualified in all mission types in which they were previously qualified unless a specific instructor training syllabus exists for a specific mission.

5.4. Flight Examiner Upgrade. Squadron commanders will select and designate flight examiners as prescribed in AFI 11-202 Volume 2, AFMC Sup 1. AFMC Form 67A3**, Flight Examiner Upgrade Ground Training,** will be accomplished by the upgrade candidate with a flight examiner qualified crewmember prior to designation as a flight examiner. File this AFMC Form 67A3 in section three of the crewmember's training folder.

5.4.1. When accepting flight examiner status from another MAJCOM, an AFMC Form 67A3**, Flight Examiner Upgrade Ground Training.** lesson plan must be accomplished to familiarize the aircrew member with AFMC policy, instructions, and regulations. The lesson plan will be

completed prior to accomplishing examiner duties and filed in section three of the crewmember's training folder.

6. TRAINING RESTRICTIONS.

6.1. General. AFMC operating procedures and restrictions are located in AFI 11-2FT Volume 3.

7. ADDITIONAL TRAINING.

7.1. General. MDS-specific attachments will specify any additional training not considered aircraft, mission, upgrade, or continuation in section 7 of the applicable attachment to this instruction.

8. COMMAND TRAINING PLANS PRESCRIBED.

8.1. General. AFMC prescribed training plans listed in **Table 13.** will be used by all flying units as directed in this instruction. Training plans tailored to specific aircraft, crew position, and/or mission are contained in the MDS-specific attachments of this instruction.

Table 13. AFMC PRESCRIBED TRAINING PLANS.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Nonqualified Personnel Training	AFMC Forms 67A1
Instructor Upgrade Training	AFMC Forms 67A2
Evaluator Upgrade Training	AFMC Forms 67A3
Loadmaster Tow Test Qualification Training	AFMC Forms 67A4 & 68A4
Loadmaster Dummy Retrieval Qualification Training	AFMC Forms 67A5 & 68A5
Loadmaster Dummy Drop Qualification Training	AFMC Forms 67A6 & 68A6
Aerial Photographer Training	AFMC Forms 67A7 & 68A7

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFJI 1-220 Volume 1, *Contractor's Flight and Ground Operations*

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

AFI 11-2FT-Volume 1, *Flight Test Aircrew Training*

AFI 11-2FT-Volume 2, *Flight Test Aircrew Evaluation Criteria*

AFI 11-2FT- Volume 3, *Flight Test Operations Procedures*

AFMCI 11-201, *Supervisor of Flying Program*

AFI 11-202V1, *Aircrew Training*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-202V3, *General Flight Rules*

AFH 11-203V1, *Weather for Aircrews*

AFI 11-205, *Aircraft Cockpit and Formation Flight Signals*

AFI 11-207, *Flight Delivery of Fighter Aircraft*

AFI 11-209, *Air Force Participation in Aerial Events*

AFMAN 11-210, *Instrument Refresher Course (IRC) Program*

AFI 11-214, Aircrew*, Weapons Director, and Terminal Attack Controller Procedures for Air Operations*

AFI 11-215, *Flight Manuals Program (FMP)*

AFPAM 11-216, *Air Navigation*

AFI 11-217V1, *Instrument Flight Procedures*

AFI 11-217V2, *Instrument Flight Procedures*

AFI 11-218, *Aircraft Operations and Movement on the Ground*

AFMAN 11-226, *US Standard for Terminal Instrument Procedures (TERPS)*

AFMAN 11-230, *Instrument Procedures*

AFI 11-290, *Cockpit/Crew Resource Management Training Program*

AFI 11-301, Aircrew *Life Support Program*

AFI 11-401, *Flight Management*

AFI 11-404, *Centrifuge Training for High-G Aircrew*

AFI 11-410, *Personnel Parachute Operations*

AFPAM 11-419, *G-Awareness for Aircrew*

AFI 13-201, *Air Force Airspace Management*

AFI 13-202, *Overdue Aircraft*

AFI 13-212V1, *Range Planning & Operations*

AFI 24-101, Passenger *Movement*

AFJMAN 24-204, *Preparing Hazardous Materials For Military Air Shipments*

AFI 33-360V1, *Publications Management Program*

AFM 51-40, *Air Navigation*

T.O. 1-1-300, *Functional Check Flight Procedures*

CJCSM 3212.02, *Performing Electronic Attack in the United States and Canada*

FAAH 7610.4, *Federal Aviation Administration Handbook*

Note 1. The entire AFTTP3-1 and 3-3 series of instructions contains useful reference information for areas not specifically covered in the instruction and may be used to enhance safe operations.

Note 2. Guidance in aircraft Flight Manuals, performance manuals, weapons delivery manuals, air refueling manuals and Technical Orders are the primary references for operation of the corresponding aircraft.

Abbreviations and Acronyms

A/A—Air to Air

AAC—Air Armament Center

AAI—Air to Air Intercept

AB—Afterburner

AC—Aircraft Commander

ACF—Acceptance Check Flight

ACBT—Air Combat Training

ACC—Air Combat Command

ACCI—Air Combat Command Instruction

ACCMAN—Air Combat Command Manual

ACCR—Air Combat Command Regulation

AC2ISRC—Aerospace Command and Control & Intelligence, Surveillance and Reconnaissance Center

ADI—Attitude Director Indicator

ADS—Aerial Delivery System/Support

AFAC—Air Forward Air Controller

AFFTC—Air Force Flight Test Center

AFI—Air Force Instruction

AFJI—Air Force Joint Instruction

AFM—Air Force Manual

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFMSS—Air Force Mission Support System

AFORMS—Air Force Operations Resource Management System

AFPAM—Air Force Pamphlet

AFR—Air Force Regulation

AFRC—Air Force Reserve Command

AFSATCOM—Air Force Satellite Communication

AFTO—Air Force Technical Order

AFTTP—Air Force Tactics, Techniques, and Procedures

AGL—Above Ground Level

AGM—Air to Ground Missile

AHC—Aircraft Handling Characteristics

AHRS—Attitude Heading Reference System

AIM—Air Intercept Missile

AIRMET—Airman's Meteorological Information

ALCM—Air Launched Cruise Missile

ALTRV—Altitude Reservation

AMC—Air Mobility Command

AOA—Angle of Attack

APU—Auxiliary Power Unit

AR—Air Refueling

ARA—Airborne Radar Approach

ARCP—Air Refueling Control Point

ARCT—Air Refueling Control Time

ARDA—Airborne Radar Directed Approach

ARIP—Air Refueling Initial Point

ARTCC—Air Route Traffic Control Center

ASL—Above Sea Level

ASR—Airport Surveillance Report

ATC—Air Traffic Control

ATD—Aircrew Training Device

AVTR—Aircraft Video Tape Recorder

AWACS—Airborne Warning and Control System

BASH—Bird Aircraft Strike Hazard

BFM—Basic Fighter Maneuver

BIT—Built-in Test

BMC—Basic Mission Capable

BRA—Bomb Rack Assembly/Bearing-Range-Altitude

BRL—Bomb Release Line

BW—Bomb Wing

BQ—Basic Qualified

CADC—Central Air data Computer

CAPS—Critical Action Procedures

CATM—Captive Air Training Missile

CARA—Combined Altitude Radar Altimeter

CBI—Computer Based Instruction

CC—Commander

CCB—Configuration Control Board

CCP—Command Chief Pilot

CDS—Container Delivery System

CE—Combat Edge

CFIC—Central Flight Instructor Course

CFL—Critical Field Length

CFP—Compatibility Flight Profile

CFPS—Combat Flight Planning System

CFT—Cockpit Familiarization Trainer

CFTR—Combined Force Training

CG—Center of Gravity

CHUM—Chart Update Manual

COMSEC—Communications Security

CPT—Cockpit Procedures Trainer

CRM—Crew Resource Management

CSS—Control Stick Steering

CT—Continuation Training

CTP—Companion Trainer Program

CW—Chemical Warfare

DACBT—Dissimilar Air Combat Training

DACT—Dissimilar Air Combat Tactics

DAFIF—Digital Aeronautical Flight Information File

DCPPI—Displaced Center Plan Position Indicator

DFO—Director of Flight Operations

DH—Decision Height

DMPI—Designated Mean Point of Impact

DNIF—Duties Not Including Flying

DO—Director of Operations

DOD—Department of Defense

DR—Dead Reckoning

DSO—Defensive Systems Officer

DTC—Data Transfer Cartridge

DTUC—Data Transfer Unit Cartridge

DTU—Data Transfer Unit

DT&E—Developmental Test and Evaluation

DZ—Drop Zone

EA—Electronic Attack

EADI—Electronic Altitude Director Indicator

EC—Electronic Combat

ECM—Electronic Countermeasures

EEFI—Essential Elements of Friendly Information

EMCON—Emission Control

EO—Electro-Optical

EMI—Electromagnetic Interference

EOD—Explosive Ordinance Disposal

EOR—End of Runway

EP—Evaluator Pilot/Emergency Procedure

EPE—Emergency Procedures Evaluation

EPR—Exhaust Pressure Ratio

EPU—Emergency Power Unit

ERCC—Engine Running Crew Change

ESA—Emergency Safe Altitude

ETA—Expected Time of Arrival

EVS—Electro-Optical Viewing System

EWO—Electronic Warfare Officer

FAA—Federal Aviation Administration

FAAH—Federal Aviation Administration Handbook

FAF—Final Approach Fix

FAR—Federal Aviation Regulation

FENCE—Fuel, Emissions, Navigation, Communications, Expendables

FCD—Flight Characteristic Demonstration

FCF—Functional Check Flight

FCIF—Flight Crew Information File

FCS—Flight Control System

FE—Flight Engineer

FEB—Flight Evaluation Board

FIC—Flight Instructor Course

FIE—Fighter Inceptor Exercise

FL—Flight Level; Flight Lead

FLIP—Flight Information Publications

FLIR—Forward Looking Infrared

FM—Field Manual/Frequency Modulation

FOD—Foreign Object Damage/Debris

FQIS—Fuel Quantity Indicating System

FRL—Fuselage Reference Line

FSS—Flight Service Station

FTU—Formal Training Unit

FTT—Flight Test Technique

FVR—Flight Vector Reference

FWS—Fighter Weapons School

GCAS—Ground Collision Avoidance System

GCC—Graduated Combat Capability

GCI—Ground Control Intercept

GFAC—Ground Forward Air Controller

GFR—Government Flight Representative

GPS—Global Positioning System

GS—Ground Station (LRE or MCE)

GSS—Gyro Stabilization System

GRM—Gate Release Mechanism

HA—Absolute Altitude

HAA—Height Above Aerodrome

HAHO—High Altitude High Opening Technique

HALO—High Altitude Low Opening Technique

HAT—Height Above Touchdown

HDBK—Handbook

HF—High Frequency

HHD—Higher Headquarters Directed

HHQ—Higher Headquarters

HQ—Headquarters

HUD—Heads-up Display

IAF—Initial Approach Fix

IAW—In Accordance With

ICAO—International Civil Aviation Organization

ID—Identification

IFF—Identification Friend or Foe

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

INS—Inertia Navigation System

INU—Initial Navigation Unit

IOS—Instructor Operator Station

IP—Instructor Pilot or Initial Point

IQC—Initial Qualification Course

IQT—Initial Qualification Training

IR—IFR Military Training Route

IRC—Instrument Refresher Course

JDAM—Joint Direct Attack Munition

JOAP—Joint Oil Analysis Program

KCAS—Knots Calibrated Airspeed

KGS—Knots Ground Speed

KIAS—Knots Indicated Airspeed

KTAS—Knots True Airspeed

LAAF—LANTIRN Altitude Advisory Function

LANTIRN—Low Altitude Navigation and Targeting Infrared for Night

LASTD—Low Altitude Step Down

LASTE—Low Altitude Safety and Targeting Enhancement

LAWS—Low Altitude Warning System

LOWAT—Low Altitude training

LASTD—Low Altitude Step Down

LASTE—Low Altitude Safety and Targeting Enhancement

LC—Lost Communications

LG—Logistics Group

LIS—Line in the Sky

LPU—Life Preserver Units

LRE—Launch and Recovery Element

LZ—Landing Zone

MAC—Mean Aerodynamic Chord

MAJCOM—Major Command

MAP—Missed Approach Point

MARSA—Military Assumes Responsibility for Separation of Aircraft

MAU—Miscellaneous Armament Unit

MC—Mission Capable/Mission Commander

MCE—Mission Control Element

MCH—Multi-Command Handbook

MCM—Multi-Command Manual

MCOPR—MAJCOM Office of Primary Responsibility

MCR—Multi-Command Regulation

MDS—Mission Design Series

MDA—Minimum Descent Altitude

MEA—Minimum Enroute Altitude

MEL—Minimum Equipment List

MESP—Mission Essential Support Personnel

MFD—Multi-Functional Display

MIL—Military

MITO—Minimum Interval Takeoff

ML—Mission Lead

MLG—Main Landing Gear

MOA—Military Operating Area

MP—Mission Pilot

MQT—Mission Qualification Training

MRR—Minimum Runway Required

MS—Mission Support

MSA—Minimum Safe Altitude

MSL—Mean Sea Level

MT—Mission Trainer

MTR—Military Training Route

MP—Mission Pilot

MPS—Mission Planning Software/Mission Planning System

MVR—Maneuver

N/A—Not Applicable

NDI—Non-Destructive Inspection

NM—Nautical Miles

NMR—Non Mission Ready

NORDO—No Radio

NOTAM—Notice to Airmen

NSS—Navigation System

NVG—Night Vision Goggles

NVIS—Night Vision Imaging System

OAS—Offensive Avionics System

OFP—Operational Flight Program

OG—Operations Group

OG/CC—Operations Group Commander

OMR—Optical Mark Reader

ONC—Operational Navigation Charts

OPR—Office of Primary Responsibility

OPSEC—Operations Security

OSO—Offensive Systems Officer

OSS—Operations Support Squadron

OWS—Overload Warning System

OT&E—Operational Test and Evaluation

PAR—Precision Approach Radar

PIC—Pilot in Command

PDM—Programmed Depot Maintenance

PDS—Parachute Deployment System

PECP—Primary Entry Control Point

PF—Pilot Flying

PFPS—Portable Flight Planning Software

PIC—Pilot in Command

PIREP—Pilot Report (Weather)

PMSV—Pilot to Metro Service

PNF—Pilot Not Flying

POC—Point of Contact

PPI—Plan Position Indicator

PTA—Planned Time of Arrival

PTAIP—Primary Terrain Avoidance Initiation Point

RAA—Route Abort Altitude

RAPCON—Radar Approach Control

RCO—Range Control Officer

RCR—Runway Conditions Reading

RCS—Radar Cross Section

RDT&E—Research Developmental Test and Evaluation

RIA—Recovery Initiation Altitude

RLA—Rotary Launcher Assembly

RNAV—Enroute Area Navigation

ROE—Rules of Engagement

RPI—Rated Position Identifier

RPM—Revolutions Per Minute

RTB—Return to Base

RVR—Runway Visual Range

RQC—Requalification Course

RWR—Radar Warning Receiver

RZ—Rendezvous

SA—Situational Awareness or Surface Attack

SAR—Search and Rescue or Synthetic Aperture Radar

SARCAP—Search and Rescue Combat Air Patrol

SAT—Surface Attack Tactics

SCA—Self Contained Approach

SD—Spatial Disorientation

SEFE—Stan/Eval Flight Examiner

SELO—Stan/Eval Liaison Officer

SFO—Simulated Flame Out

SIF—Selective Identification Feature

SIGMET—Significant Meteorological Information

SILS—Synthetic Instrument Landing System

SKE—Station Keeping Equipment

SMA—Start Maneuver Area

SOF—Supervisor of Flying

SPINS—Special Instructions

SPD—System Program Director

SPR—Single Point Refueling

SQ—Squadron

SRB—Safety Review Board

SSE—Simulated Single Engine

SSM—System Support Manager

STAN/EVAL—Standardization & Evaluation

STV—Steerable Television

SUU—Bomb Suspension and Release Unit

TA—Terrain Avoidance

TACAN—Tactical Air Navigation

TAL—Transfer Alignment

TAS—True Air Speed

TBD—To Be Determined/Developed

TDY—Temporary Duty

TDZ—Touch Down Zone

TERPS—Terminal Instrument Procedures

TF—Terrain Following

TFR—Terrain Following Radar

TOLD—Take Off Landing Data

TOT—Time Over Target

TPC—Tactical Pilotage Chart

TPS—Test Pilot School

TR—Transit Route

TRB—Technical Review Board

TSO—Target Study Officer

TTR—Tactics and Training Range

UDLM—Unscheduled Depot Level Maintenance

UHF—Ultra High Frequency

UMD—Unit Manning Document

USAF—Unit States Air Force

USAFTPS—United States Air Force Test Pilot School

UTD—Unit Training Device

VASI—Visual Approach Slope Indicator

VDP—Visual Descent Point

VOR—VHF Omni Range

VFR—Visual Flight Rules

VHF—Very High Frequency

VLD—Visual Level Delivery

VMC—Visual Meteorological Conditions

VR—VFR Military Training Route

VRD—Vision Restricting Device

WSO—Weapons Systems Officer

VTR—Video Tape Recorder

WST—Weapons Systems Trainer

Terms

Additional Crew Member (ACM)—Mobility aircrew members and authorized flight examiners possessing valid aeronautical orders who are authorized to accompany the normal crew complement required for that mission.

Airlift —Aircraft is considered to be performing airlift when manifested passengers or cargo are carried.

Allowable Cabin Load (ACL) —The maximum payload that can be carried on an individual sortie.

Alternate Entry Control Point (Alternate Entry Fix) —The route point(s) upon which a control time for an alternate entry into the route is based.

Assault Landing Zone (ALZ) —A paved or semi-prepared (unpaved) airfield used to conduct operations in an airfield environment similar to forward operating locations. ALZ runways are typically shorter and narrower than standard runways.

Augmented Crew —Basic aircrew supplemented by additional qualified aircrew members to permit in-flight rest periods.

Bingo Fuel —The computed fuel remaining at a point in flight that will allow safe return to the point of intended landing with required fuel reserve.

Block Time —Time determined by the scheduling agency responsible for mission accomplishment for the aircraft to arrive at (block in) or depart from (block out) the parking spot.

Category I Route —Any route that does not meet the requirements of a category II route, including tactical navigation and over-water routes.

Category II Route —Any route on which the position of the aircraft can be accurately determined by the overhead crossing of a radio aid (NDB, VOR, TACAN) at least once each hour with the positive course guidance between such radio aids.

Circular Error Average (CEA) —Indicator of the accuracy of an airdrop operation. It is the radius of a circle within which half of the air-dropped personnel and items or material have fallen.

Combat Control Team (CCT) —A small task organized team of Air Force parachute and combat diver qualified personnel trained and equipped to rapidly establish and control drop, landing, and extraction zone air traffic in austere or hostile conditions. They survey and establish terminal airheads as well as provide guidance to aircraft for airlift operation. They provide command and control, and conduct reconnaissance, surveillance, and survey assessments of potential objective airfields or assault zones. They also can perform limited weather observations and removal of obstacles or unexploded ordinance with demolitions. Also called CCT.

Command Chief Pilot —An aircrew assigned to HQ AFMC/DOV or an appointee that assists the HQ Stan/Eval team and conducts flight evaluations on behalf of the headquarters

Conference SKYHOOK —Communication conference available to help aircrews solve in-flight problems that require additional expertise.

Critical Phase of Flight —Takeoff, low level (below MSA), airdrop, weapon delivery, air refueling, approach, and landing.

Deadhead Time —Duty time for crewmembers positioning or de-positioning for a mission or mission support function and not performing crew duties.

Deviation —A deviation occurs when takeoff time is not within –20/+14 minutes of scheduled takeoff time.

Difference (conversion) Evaluation —An evaluation administered to an aircrew qualified in a variant of a particular aircraft. For example, variants of the B-707 airframe, different series of a particular M/D, or different block versions. Difference training is considered Phase I (initial qualification) training.

Direct Instructor Supervision —Supervision by an instructor of like specialty with immediate access to controls (for pilots, the instructor must occupy either the pilot or copilot seat).

Drop Zone (DZ) —A specified area upon which airborne troops, equipment, or supplies are air-dropped.

Due Regard —Operational situations that do not lend themselves to International Civil Aviation Organization (ICAO) flight procedures, such as military contingencies, classified missions, politically sensitive missions, or training activities. Flight under "Due Regard" obligates the military aircraft commander to be his or her own air traffic control (ATC) agency and to separate his or her aircraft from all other air traffic. (See FLIP General Planning, section 7)

DZ Entry Point —A fixed point on DZ run-in course where an aircraft or formation or aircraft may safely begin descent from IFR en route altitude to IFR drop altitude. The DZ entry point is a maximum of 40 NM prior to the DZ exit point according to Federal Aviation Administration FAR exemption 4371C. Formation descent will not begin until the last aircraft in formation is at or past the DZ entry point.

DZ Exit Point —A fixed point on the DZ escape flight path centerline, established during pre-mission planning, at which the formation will be at the minimum IFR en route altitude. Calculate the exit point based upon three-engine performance at airdrop gross weight. This point will be planned no less than four NM track distance beyond the DZ trailing edge.

Earliest Descent Point (EDP) —Earliest point in the DZ run-in course where the lead aircraft may begin IFR descent to IFR drop altitude and be assured of terrain clearance for the entire formation. Compute EDP by subtracting formation length from the computed DZ entry point.

Equal Time Point —Point along a route at which an aircraft may either proceed to destination or first

suitable airport or return to departure base or last suitable airport in the same amount of time based on all engines operating.

End Maneuver Area (EMA) —A control point terminating the bomb run area.

Entry Control Time —The scheduled time over the Primary/Alternate Entry Control Point.

Entry Track —A track, usually associated with a bomber IR and beginning at the Primary or alternate Entry Point, along which descent is made to the low altitude portion of the route.

Estimated Time In Commission (ETIC) —Estimated time required to complete required maintenance.

Evaluation Form—Worksheet used to document any evaluation to prepare the AF Form 8.

Execution —Command-level approval for initiation of a mission or portion thereof after due consideration of all pertinent factors. Execution authority is restricted to designated command authority.

Familiar Field —An airport in the local flying area at which unit assigned aircraft routinely perform transition training. Each operations group commander will designate familiar fields within their local flying area.

Fix—A position determined from terrestrial, electronic, or astronomical data.

Fuel:

   Normal Fuel—Fuel state on initial or at the final approach fix such that the aircraft can land with the fuel reserves specified in 11-202 Vol. 3.

   Minimum Fuel—Fuel state, where, upon reaching the destination, the aircraft can accept little or no delay. This is not an emergency situation but merely indicates an emergency situation is possible should any undue delay occur.

   Emergency Fuel—Fuel state requires immediate traffic priority to safely recover the aircraft. An emergency will be declared and the aircraft immediately recovered at the nearest suitable field.

Global Decision Support System (GDSS) —AMC primary execution command and control system. GDSS is used to manage the execution of AMC airlift and tanker missions.

Hazardous Cargo or Materials (HAZMAT) —Articles or substances that are capable of posing significant risk to health, safety, or property when transported by air and classified as explosive (class 1), compressed gas (class 2), flammable liquid (class 3), flammable solid (class 4) oxidizer and organic peroxide (class 5), poison and infectious substances (class 6), radioactive material (class 7), corrosive material (class 8), or miscellaneous dangerous goods (class 9). Classes may be subdivided into divisions to further identify hazard (i.e., 1.1, 2.3, 6.1, etc.).

Initial Cadre —Those personnel assigned to conduct flight testing of experimental, developmental, or new aircraft for which there are no established formal training programs nor standardized evaluation criteria. Initial Cadre designations are appropriate through Initial Operational Capability.

Instructor Supervision —Supervision by an instructor of like specialty (see also Direct Instructor Supervision).

Inter-fly —The exchange and/or substitution of aircrews and aircraft between Mobility Air Forces (MAF) including crewmembers and/or aircraft from AETC, ACC, PACAF, USAFE, AMC, ANG and AFRC forces not gained by AFMC.

Jumpmaster —The assigned airborne qualified individual who controls parachutists from the time they enter the aircraft until they exit.

Knock-it-Off —A term any crewmember may call to terminate a training maneuver. Upon hearing "knock-it-off" the crew should establish a safe altitude, airspeed and return the aircraft power and flight controls to a normal configuration.

Landing Zone (LZ) —An area of sufficient size to allow discharge or pickup of passengers or cargo by touchdown or low hover.

Latest Descent Point —Latest planned point on the DZ run-in course where the formation plans to initiate descent to drop altitude. This is planned to ensure all aircraft in the formation are stabilized (on altitude and airspeed) prior to the drop.

Lead Crew —A crew consisting of a lead qualified aircraft commander and a lead qualified navigator.

Letter of "X"s—A document used in AFMC, signed by appropriate authority, that lists each assigned/ attached aircrew's aircraft designation, crew position, and mission qualifications.

Local Training Mission—A mission scheduled to originate and terminate at home station (or an off-station training mission), generated for training or evaluation and executed at the local level.

Low Altitude Navigation Leg —The route segments of a bomber IR between the TA Initiation Point and TA Termination Point. For non-bomber IR, the low altitude navigation leg is that portion of the route designed primarily for low altitude flight; does not include segments intended for descent into and climb-out from the route.

Maintenance Status—

Code 1 - No maintenance required.

Code 2 (Plus Noun) --Minor maintenance required, but not serious enough to cause delay. Add nouns that identify the affected units or systems, i.e. hydraulic, ultra high frequency (UHF) radio, radar, engine, fuel control, generator, etc. Attempt to describe the nature of the system malfunction to the extent that appropriate maintenance personnel will be available to meet the aircraft. When possible, identify system as mission essential (ME) or mission contributing (MC).

Code 3 (Plus Noun) -- Major maintenance. Delay is anticipated. Affected units or systems are to be identified as in Code 2 status above.

Manmade Obstructions —Structures which present a hazard to flight. Structure height is measured from the ground-base.

Mark —The time when an aircraft passes over the landing zone or ground party.

Military Airspace Management System (MASMS) —The term MASMS in this instruction refers to Detachment 1, HQ ACC/DOR, the Military Airspace Management System Office at Offutt AFB, NE.

MASMS IR Route —A route scheduled through Det 1, HQ ACC/DOSR using the MASMS scheduling system.

Mission —1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task.

Mission Contributing (MC) —Any degraded component, system, or subsystem which is desired, but

not essential to mission accomplishment.

Mission Essential (ME)—An degraded component, system, or subsystem which is essential for safe aircraft operation or mission completion.

Modified Contour —Flight in reference to base altitude above the terrain with momentary deviations above and below the base altitude for terrain depressions and obstructions to permit a smooth flight profile.

Non-MASMS IR Route —A route in which scheduling activity in AP/1B is other than Det 1, HQ ACC/ DOSR.

Off Station Training Flight —A training flight that originates or terminates at other than home station that is specifically generated to provide the aircrew experience in operating away from home station. Off station trainers will not be generated solely to transport passengers, cargo, or position/deposition crewmembers.

Operational Risk Management (ORM) —A logic-based common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after Air Force operations. It enables commanders, functional managers and supervisors to maximize operational capabilities while minimizing risks by applying a simple systematic process appropriated for all personnel and Air Force functions.

Operational Site —An LZ that has (1) been surveyed by an instructor pilot (IP) experienced in remote operations to ensure no hazards exist, (2) a photograph available for aircrews to study the site prior to landing and (3) approval from the DFO to be designated an operational site. Whenever practical, operational sites should have permanently installed and properly maintained wind indicators (wind sock, streamer, etc.).

Opportune Airlift —Transportation of personnel, cargo, or both aboard aircraft with no expenditure of additional flying hours to support the airlift.

Originating Station —Base from which an aircraft starts on an assigned mission. May or may not be the home station of the aircraft.

Over Water Flight —Any flight that exceeds power off gliding distance from land.

Primary /Alternate Exit Point —The final way-point published in FLIP for the primary or alternate exit route. For bomber IR, the final point on the climb-out track. For other routes, may coincide with the final TA Termination Point.

Primary/Alternate TA Initiation Point (Initial/Start TA) —The way-point at which aircrew are authorized to begin TA operations.

Primary/Alternate TA Termination Point (Final/End TA) —The point which denotes the end of TA operations.

Primary Entry Control Point (PECP) —Referred to as the Entry Fix. The route point upon which a control time for route entry is based.

Provisions—A statement on the front of the AF Form 8 indicating conditions for which the evaluation may satisfy recurring evaluation requirements, usually used for no-notice or out-of-the-eligibility-period evaluation. For example: "Provision: Open and closed book exams due NLT 30 Apr 97."

Reentry Track —A track, commencing at the end of a Maneuver Area, on which low altitude re-entry to

the route can be achieved to execute additional bomb/ECM/AGM runs.

Restriction—A statement on the front of the AF Form 8 that places limitations on the duties that may be performed by an aircrew, usually as a result of a failed ground or flight phase event. For example, "Restriction: Examinee will not fly unless under the supervision of an instructor pilot, Day Only, Conus Only".

Route Width (Route Perimeter) —The route boundary limits within which aircraft are restricted to conduct operations.

Senior Flight Examiner,—A commander authorized to conduct SPOT evaluations for assigned/attached aircrews.

Significant Meteorological Information (SIGMET) —Area weather advisory issued by an ICAO meteorological office relayed to and broadcast by the applicable ATC agency. SIGMET advisories are issued for tornadoes, lines of thunderstorms, embedded thunderstorms, large hail, sever and extreme turbulence, severe icing, and widespread dust or sand storms. SIGMET frequently covers a large geographical area and vertical thickness. They are prepared for general aviation and may not consider aircraft type or capability.

Squadron Top 3 —Squadron ADO, DO, CC.

Stabilization Point —Point on the DZ run-in course at which the lead aircraft should plan to be stabilized at drop altitude and airspeed. This point will be planned to be at least 6 NM prior to the point of impact.

Station Time —In air transport operations, the time at which crews, passengers, and cargo are to be on board and ready for the flight.

Start Maneuver Area (SMA) —The point that defines the start of the bomb run area. Timing control must be within applicable tolerances.

Suitable Airfield (C-130) —Normally, suitable airfields are those that meet C-130 weather, fuel, and runway requirements (chapter 6) are within 50 NM of flight plan course centerline.

Temporary - 2 (T-2) Modification —T-2 modifications are temporary modification required to support research, development, test, and evaluation (RDT&E), in service testing of potential replacement items (form, fit, and function), and for aircraft/stores compatibility testing.

Tactical Event (C-130) —Airdrop, low level, formation, and threat avoidance approaches/ departures.

TA Visual Conditions (B-52) —Weather conditions that permit aircraft operations clear of clouds, provide the pilots visual contact with the ground, and three miles forward visibility.

Terminal Fuel Flow (TFF) (C-130) —The fuel flow rate expected during the last hour at cruise altitude. It is the difference between the fuel required for en-route time plus one hour and fuel required for en-route time. TFF may also be computed using the T.O. 1C-130X-1-1 fuel flow table and the estimated aircraft weight at destination. Estimated gross weight is determined by subtracting fuel burn off from takeoff gross weight.

Terrain Avoidance (TA) (B-52) —Method of maintaining ground clearance by Terrain Trace, EVS, or Radarscope Interpretation as close the terrain as equipment, command directives, and crew judgment allow.

Time Out—See definition for "Knock it Off."

Training Mission —Mission executed at the unit level for the sole purpose of aircrew training for upgrade or proficiency. Does not include operational missions as defined in this AFI.

Unilateral—Operations confined to a single service.

Visual Contour Flight —Operation at a predetermined altitude above the ground, following contours visually using the radar altimeter to crosscheck altitude. An operating radar altimeter is required.

Visual Reconnaissance—Aerial survey of areas, routes, or LZs.

Zero Fuel Weight —Weight, expressed in pounds, of a loaded aircraft not including wing and body tank fuel. All weight in excess of the maximum zero fuel weight will consist of usable fuel.

Attachment 2

AFORMS EVENT IDENTIFIERS

<u>**FLYING TRAINING EVENTS**</u>

DESCRIPTION	EVENT NAME	EVENT ID

<u>**LANDINGS**</u>

DESCRIPTION	EVENT NAME	EVENT ID
TOTAL	TOT LNDG	LD00
DAY	DAY LNDG	LD01
SIMULATED ENGINE OUT	ENG OUT LNDG	LD02
NO FLAP	NF LNDG	LD03
SIMULATED 2 ENGINE OUT	2ENG OUT LNDG	LD04
NIGHT	NIGHT LNDG	LN05
TOUCH & GO	TOUCH & GO	LG01
NO FLAP TOUCH & GO	NF T & G	LG02
FORMATION LEAD	FORM LEAD	LF01
FORMATION WING	FORM WING	LF02
BACK/RIGHT SEAT	BK ST LNDG/RT ST LNDG	LB01
BACK SEAT NIGHT	BK ST NT LNDG	LB02

<u>**TAKEOFFS**</u>

DESCRIPTION	EVENT NAME	EVENT ID
TAKEOFF	TAKEOFF	TO01
SIMULATED ENGINE OUT TAKEOFF	ENG OUT T/O	TO02
FORMATION TAKEOFF	FM T/O	TO03
HELO TAKEOFF	HELO T/0	TH01
FORMATION LEAD	FM LEAD T/O	TL01
FORMATION WING	FM WING T/O	TW01
FORMATION NIGHT LEAD	FM NT/LEAD	TL05
FORMATION NIGHT WING	FM NT/WING	TW05
UMV LAUNCH	UV LNCH	TV00

<u>**SORTIES**</u>

DESCRIPTION	EVENT NAME	EVENT ID
TOTAL	TOT SORTS	ST00
TOTAL NIGHT	TOT N/SORT	SN00
PROFICIENCY SORTIE	PROF SORT	SP01

DELIVERY	DEL SORT	SF03
TEST	TEST SORT	SF04
TEST SUPPORT	TEST SUPT SORT	SF05
TRAINING	TRNG SORT	SF06
SPECIAL MISSION	SPECIAL MSN	SF07
FUNCTIONAL CHECK FLIGHT	FCF	SF08
EMERGENCY PROCEDURE	HELO EMER PROC	SE00
NIGHT VISION GOGGLES	NVG SORT	VV01
RESERVED	RESERVED	SE05
CONVERSION SORTIE	CONV SORT	SC00

APPROACHES

TOTAL APPROACHES	TOT APR	PA00
PRECISION	PRE APPR	PA01
MISSED APPROACH	MSSD APPR	PA02
PRECISION HUD OFF	PRE H/OFF	PA03
NON PRECISION	N/PRE APPR	PA04
NON PRECISION HUD OFF	N/PRE H/OFF	PA06
SIMULATED ENGINE OUT APPR	ENG OUT APPR	PA07
SIMULATED ENGINE OUT MISSED APP	ENG OUT MAPPR	PA08
SIMULATED 2 ENGINE OUT APPR	2ENG OUT APPR	PA09
NO FLAP APPROACH	NF APPR	PA10
NDB APPROACH	NDB APPR	PA11
CIRCLING APPROACH	CIRCLING APPR	PA12

AIR EVENTS

TOTAL INTERCEPT	INCP TOTAL	AI00
INTERCEPT DAY	INTERCEPT DAY	AI10
INTERCEPT NIGHT	INTERCEPT NIGHT	AI11
ADVANCED HANDLING	ADV HAND	AC01
CHASE	CHASE	AC02
LOW LEVEL	L/LEVEL	AC03
LOW LEVEL STEP DOWN	LASDE	AL01
ACBT	ACBT	AC04
BFM	BFM	AC05
DBFM	DBFM	AC06

SFO	SFO	AC07
HOLDING	HOLD	AC08
CELESTIAL OBSERVATIO/RESOLUTION	CEL OBS	AC09
AIRDROP	AIRDROP	AD00
COMBAT EDGE	CBT EDGE	AE01
FORMATION	FORM	AF00
ELECTRONIC COUNTERMEASURES	ECM	AE02

AIR EVENTS (HELO)

REMOTE AREA OPS (HELO)	HELO REOPS	AT02
HOIST OPS (LAND)	HELO OPS L	AT03
HOIST OPS (WATER)	HELO OPS W	AT04
SEARCH OPS	HELO S OPS	AT05
CARGO SLING	HELO C SLING	AT06

WEAPONS DELIVERY

TOTAL WEAPONS DELIVERY	WPN DEL TOT	WD00
AIR TO AIR	A/A WPN DEL	WD01
AIR TO GROUND	A/G WPN DEL	WD02
TEST	WPN DEL TEST	WD03

AIR REFUELING

TANKER SORTIE	A/R RECV	AR00
RECEIVER SORTIE	A/R TNKR	AR01
TANKER RENDEZVOUZ	A/R TKR REND	AR02
RECEIVER RENDEZVOUZ	A/R REC REND	AR03
TANKER CONTACTS	A/R TKR CONTACT	AR05
TANKER MANUAL CONTACTS	A/R TKR MAN CONTACT	AR06
RECEIVER CONTACT	A/R REC CONTACT	AR07
RECEIVER CONTACT – DAY	A/R REC CONTACT DAY	AR08
RECEIVER CONTACT- NIGHT	A/R REC CONTACT NIGHT	AR09
RECEIVER BREAKAWAY	A/R RECV BREAK	AR10
TANKER BREAKAWAY	A/R TNKR BREAK	AR11

PARACHUTIST TRAINING (AFI 11-410 , AFMC SUP)

TOTAL JUMPS	TOT JUMP	PJ00
STATIC LINE JUMP	SL JUMP	PJ01
FREEFALL JUMP	FF JUMP	PJ02
FREEFALL MANEUVERING JUMP	FFM JUMP	PJ03
EQUIPMENT JUMP	EQUIP JUMP	PJ04
NIGHT JUMP	NIGHT JUMP	PJ05
WATER JUMP	WATER JUMP	PJ06
C-9 JUMP	C-9 JUMP	PJ07
STATIC LINE OR FREEFALL MISSION	SL/FF MSN	PJ08
EMERGENCY PROCEDURES	EMERGENCY PROC	PJ10
JUMPMASTER MISSION	JM MSN	PJ20
ANNUAL PHYSICAL FITNESS TEST	PJ FITNESS TEST	PJ30
ANNUAL JUMP RECORD REVIEW	JUMP REC REVW	PJ40

GROUND TRAINING EVENTS

DESCRIPTION	EVENT NAME	EVENT ID

STAN EVAL

QUALIFICATION CHECK	QUAL CHK	AA01
OPEN BOOK EXAM (**O**)	OPEN BOOK	AB03
CLOSED BOOK EXAM (**O**)	CLSD BOOK	AB05
PUBLICATIONS CHECK (**O**)	PUBS CHK	AB02
EMERGENCY PROCEDURES EVAL (**O**)	EPE	AB04
INSTRUMENT REFRESHER COURSE	IRC	AI01
INSTRUMENT REFRESHER EXAM	INSTM REF EXAM	AI02
INSTRUMENT CHECK	INSTM CHK	AA11
QUAL/INSTM CHECK	COMP CHK	AA21
INSTRUCTOR CHECK	INSTR CHK	AB12
MISSION CHECK	MSN CHK	AE01
DUAL QUAL DUE	DUAL QUAL	FM80

LIFE SUPPORT

LIFE SUPPORT FAMILIARIZATION TRNG(**G**)	LFST	LL01
EMERGENCY EGRESS TRNG, EJECTION(**G**)	EGRESS (EJECTION)	LL02

EMERGENCY EGRESS TRNG, NON-EJECT(**G**)	EGRESS (NON-EJECTION)	LL03
LIFE SUPPORT EQUIPMENT TRNG(**G**)	LSE TRNG	LL06
WATER SURVIVAL TRNG (**R**)	WST	LL07
HANGING HARNESS TRNG, EJECT(**G**)	HHT EJECTION	LL09
HANGING HARNESS TRNG, NON-EJECT(**G**)	HHT NON-EJECTION	LL10
LOW THREAT COMBAT SURVIVAL TRNG(**G**)	LAND SURVIVAL	LL11
HELO EMER EGRESS DEVICE TRNG(**R**)	HEED	LL13

RECURRING AIRCREW TRAINING OTHER

PHYSICAL(**G**)	PHYSICAL	PP01
PHYSIOLOGICAL TRAINING(**G**)	ALT CHAMBER	PP11
CENTRIFUGE(**G**)	CNTFG	PP12
RECORDS REVIEW	RCD REV	RR01
BASIC SURVIVAL TRNG	BASIC SURV TRN	SS01
BASIC WATER SURV	BASIC WATER TRNG	WW01
ANTI HIJACKING	ANTI HIJACK	GT01
A/C SYSTEM TRAINING	A/C SYS TRN	GT02
EP SIMULATOR (**D**)	E/P SIM	GT03
MARSHALING EXAM	MARSH EXAM	GT04
FIRE EXTINGUISHER	FIRE EXT TRN	GT05
INITIAL CRM TRAINING	CRM TRNG	CR01
RECURRING CRM TRAINING	REC CRM TRNG	CR02
ON-SCENE COMMANDER TRNG	CMDR TRNG	OC01

NOTES:

(**O**):TRACKING OF THESE EVENTS IN AFORMS IS OPTIONAL.

(**G**):ARE GROUNDING ITEMS.

(**R**):RESTRICTED FROM OVERWATER FLIGHT UNTIL ACCOMPLISHED PROVIDED CREWMEMBER HAS COMPLETED HQ AFMC/DOV APPROVED ACADEMIC PHASE OF TRAINING.

(**D**):DOCUMENTED IAW para 4.4.4.3.2.

AFORMS STANDARD AIRCRAFT CODES

A = F-15	K = B707 Series (E-3, E-8)	U = Other
B = F-16	L = T-38	V = C-135
C = F-4	M =CV-22	W = C-21
D = A-10	N = T-39	X = B-52
E =F-22	O = B-2	Y = U-2
F = C-141	P = KC-10	Z = Inactive Aircraft
G = C-5	Q = Simulators	
H = C-17	R = B-1	
I = C-130	S = F-117	
J =C-12	T = H-1	

Attachment 3

A-10 TRAINING GUIDELINES

A3.1. GENERAL.

A3.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC A-10 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional A-10 continuation training requirements.

A3.1.2. Key Words and Definitions. For the purpose of A-10 qualification training the following terms are defined.

> A3.1.2.1. Night Vision Goggle (NVG) Training. Aircrew ground and flying training which qualifies the pilot to wear NVGs while performing in-flight duties during Category 1 and/or Category 2 operations.
>
> A3.1.2.2. Category 1 (CAT 1). In-flight night operations to include enroute, transition training, basic weapons delivery on a controlled range, basic Maverick employment, and visual recce.
>
> A3.1.2.3. Category 2 (CAT 2). In-flight night operations to include all CAT 1 items in addition to tactical employment using night illumination devices (i.e. LUU-1, LUU-2, etc.) and tactical weapons delivery.
>
> A3.1.2.4. LASTE. Low Altitude Safety Targeting Enhancement.
>
> A3.1.2.5. GCAS. Ground Collision Avoidance System.

A3.2. AIRCRAFT QUALIFICATION TRAINING.

A3.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section.

A3.2.2. Ground Training Requirements.

> A3.2.2.1. Pilots will complete the A-10 ground training prescribed in **Table A3.1.** During local qualification training, a cockpit familiarization trainer (CFT) may be used in lieu of a simulator. If a CFT is not available, then the actual cockpit will be used IAW paragraph **2.3.2.** All ground training will be accomplished by a current/qualified A-10 instructor pilot.

A3.2.3. Flying Training Requirements. Pilots will complete the flying training prescribed in **Table A3.1.**

> A3.2.3.1. First Flight Requirements. An A-10 instructor pilot will fly and instruct from a chase aircraft for the first A-10 training sortie IAW paragraph **2.4.1.** The instructor pilot must observe landings from a position appropriate for the approach and landing. Ground observation of approach and landing by an A-10 instructor pilot may be used as a last resort with DFO approval.
>
> A3.2.3.2. Night Checkout Sortie. This sortie will be flown IAW guidance outlined in paragraph **2.4.3.** The upgrading pilot will not use NVGs for this sortie. The instructor may use NVGs only if qualified for NVG use.

Table A3.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67B1	1) Formal School 2) AFMC Form 67B1
Flying Training	1) Formal School or 2) AFMC Form 68B1	1) Formal School 2) AFMC Form 68B1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A3.3. MISSION QUALIFICATION TRAINING.

A3.3.1. General. **Table A3.2.** and **Table A3.3.** prescribe the minimum ground and flying training needed to qualify pilots in A-10 mission elements. AFMC prescribed A-10 missions include Flight Test, Functional Check Flight (FCF), Low Altitude Step Down Training (LASDT), Weapons Delivery, and Night Vision Goggle (NVG) training.

A3.3.2. Flight Test Training. **Table A3.2.** outlines the minimum ground and flying training required to qualify pilots in the Flight Test mission. Qualification training consists of: GCAS flight profiles to include wings level dives, banked turns, and accelerated banked turns, developmental LASTE weapons delivery profiles, and A-10 specific flight test procedures. All GCAS events will be flown in an aircraft with a minimum 1,000 ft AGL false ground plane software installed and functional or using a simulated 5000 ft AGL ground plane.

A3.3.3. Functional Check Flight (FCF) Training. FCF training will be conducted IAW paragraph **3.4. Table A3.2.** outlines the minimum ground and flying training required to qualify a pilot in the FCF mission. All ground and flying training will be accomplished referencing the most current 1-A-10A-6CF-1 checklist with an A-10 FCF qualified instructor pilot.

A3.3.4. Low Altitude Step Down Training (LASDT). Pilots will be qualified at Low Altitude in a step-down approach. The high block consists of 300-500 ft AGL, and the low block consists of 200-300 ft AGL. All low altitude training will be executed with an operating LASTE GCAS system. LASDT will be accomplished before flight below 500 ft AGL regardless of prior low altitude qualification in other MAJCOMs.

A3.3.5. Weapons Delivery (WD) Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8.**

Table A3.2. Flight Test, LASDT, FCF, and NVG Training Requirements.

REQUIREMENT	FLIGHT TEST	LASDT	FCF	WEAPONS DELIVERY
Ground Training	AFMC Form 67B2	AFMC Form 67B3	AFMC Form 67B4	Unit Developed
Flying Training	AFMC Form 68B2	AFMC Form 68B3	AFMC Form 68B4	Unit Developed
Aircrew Proficiency Exams	As Required by unit CC	As Required by unit CC	As Required By unit CC	As Required by unit CC

A3.3.6. Night Vision Goggle (NVG) Training.

A3.3.6.1. Ground Training. This training may be accomplished at either the A-10 FTU or locally at the unit. Units will designate highly experienced NVG instructor pilots to conduct local ground training, and will use ACC approved formal courseware. For local ground training, the Armstrong Labs instructional NVG videos will be used to demonstrate NVG visual illusions in place of the terrain board.

A3.3.6.1.1. Initial ground training will include instruction on the human visual system, night vision devices, the NVG environment, misperceptions and illusions, night operations, NVG adjustment and assessment, and A/OA-10 specific NVG considerations.

A3.3.6.1.2. Device Training. One supervised Cockpit Familiarization Trainer (CFT) or Unit Training device (UTD) will be accomplished within 60 days of the NVG-1 flying training. An aircraft cockpit may be used in lieu of the CTD/UTD. As a minimum the CFT/UTD will cover: cockpit and lighting set-up, donning/doffing and stowing procedures, systems operation, in-flight and weapons systems checks, HUD/instrument cross-check, in-flight scan techniques, battery change/failure procedures, and ejection considerations.

A3.3.6.2. Flying Training. One non-NVG night sortie will be flown within 45 days prior to the NVG-1 training flight. All upgrade sorties will be flown under the supervision of an NVG instructor pilot with both pilots wearing night vision goggles. No other upgrade training will be conducted in conjunction with NVG mission training. Demonstration of weapons delivery maneuvers may consist of dry passes if weapons are not available. Following successful completion of required flying training, the flying unit commander will certify the individuals to either CAT I or CAT II status.

A3.3.6.2.1. NVG-1 flying training will be accomplished within 60 days of the NVG ground training. If more than 60 days elapse prior to the NVG-1 flying training, pilots must review the Armstrong Laboratory NVG academics. If more than 180 days elapse between completion of NVG ground training and the NVG-1 flying training, pilots will re-accomplish all NVG ground training.

A3.3.6.2.2. CAT I Training. After completion of NVG-1 and NVG-2 flights training, pilots will be CAT I certified and authorized to fly NVG familiarization sorties. Events are limited to non-tactical maneuvers such as those flown on the NVG-1 and NVG-2 training missions.

A3.3.6.2.3. CAT II Training. Prior to NVG-3 flying training, pilots must complete at least 10 hours of CAT I NVG time. NVG time can only be logged while using goggles. Pilots will be Cat II certified after completion of NVG-3 flying training. Flight leads are not authorized to lead NVG sorties until completion of NVG-4 flying training. instructor pilots must complete

NVG-4 flying training, and have at least 15 hours of NVG time prior to being certified as NVG instructor pilots. Pilots who are already instructor pilots may lead NVG sorties without completing NVG-4 training if authorized by the flying unit commander.

Table A3.3. Night Vision Goggle (NVG) Training Requirements.

EVENT	NVG CATEGORY I	NVG CATEGORY II	NVG INSTRUCTOR
Ground Training	AFMC Form 67B5	AFMC Form 67B5	Unit Developed
Flying Training	AFMC Form 68B5 & 68B6	AFMC Form 68B7	Unit Developed
Aircrew Proficiency Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC

A3.4. CONTINUATION TRAINING.

A3.4.1. General. In addition to the basic currency and proficiency requirements outlined in **Table 7.** and **Table 8.**, A-10 pilots will comply with requirements outlined in **Table A3.4.** Flying unit commanders may determine additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this manual.

Table A3.4. Additional A-10 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	FCF Sortie	1/90
	LASDT Sortie	1/90
	Weapons Delivery	1/180
	NVG Sortie	1/180

A3.4.2. FCF Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 90 days. Aircrew members who exceed FCF currency requirements in **Table A3.4.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A3.4.3. LASDT Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A3.4.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A3.4.4. Weapons Delivery Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed Weapons Delivery currency requirements in **Table A3.4.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires Weapons Delivery mission qualification training

A3.4.5. NVG Requirements. NVG currency may be updated by accomplishing an NVG sortie every 180 days. Aircrew members who exceed NVG currency requirements in **Table A3.4.** may regain currency by flying an NVG sortie under the direct supervision of an NVG instructor of like specialty. Loss of currency exceeding 6 months requires NVG mission qualification training

A3.5. UPGRADE TRAINING.

A3.5.1. Instructor Pilot Upgrade. Instructor upgrade training will be conducted IAW paragraph **5.3.** **Table A3.5.** outlines the minimum ground and flying training required for instructor upgrade.

Table A3.5. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67B1
Flying Training	AFMC Form 68B1
Aircrew Exams	As required by unit CC

A3.6. TRAINING RESTRICTIONS.

A3.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A3.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A3.8. A-10 TRAINING PLANS PRESCRIBED.

A3.8.1. General. A-10 prescribed training plans listed in **Table A3.6.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A3.6. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification, & Requalification Training	AFMC Forms 67B1 & 68B1
Flight Test Training	AFMC Forms 67B2 & 68B2
Functional Check Flying training	AFMC Forms 67B4 & 68B4
LASDT	AFMC Forms 67B3 & 68B3
Night Vision Goggles Training	AFMC Forms 67B5 & 68B5, B6, B7
Instructor Upgrade Training	AFMC Forms 67A2, 67B1 & 68B1

Attachment 4

B-1 TRAINING GUIDELINES

A4.1. GENERAL.

A4.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC B-1 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1, as supplemented. It also prescribes additional B-1 continuation training requirements.

A4.1.2. Key Terms and Definitions.

A4.1.3. Aircrew Requirements and Qualifications.

A4.1.3.1. OSO/DSO/WSO Requirements. The flying unit commander will determine the aft station crew complement for training to include qualified Offensive Systems Officer (OSO), Defensive Systems Officer (DSO) and Weapon Systems Officer (WSO) based on flight manual and unit mission training requirements. "Nontraditional" DSO crew procedures, if applicable, must be developed by the unit and incorporated into the unit's supplement.

A4.2. AIRCRAFT QUALIFICATION TRAINING.

A4.2.1. This section outlines prescribed initial and requalification training for pilot, OSO, DSO, and WSO positions. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirement outlined in this instruction.

A4.2.2. Ground and Flying Training Requirements.

A4.2.2.1. Refer to **Table A4.1.** (pilots), **Table A4.2.** (OSO/DSO/WSO), and **Table A4.3.** (FTE) for qualification and requalification training requirements based on prior qualifications.

Table A4.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC 67C1 & 68C1	1) Formal School 2) AFMC Form 67C1 & 68C1
Flying Training	1) Formal School or 2) AFMC Form 68C2	1) Formal School 1) AFMC Form 68C2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A4.2. OSO/DSO/WSO Qualification/Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67C2 & 68C3	1) Formal School 1) AFMC Form 67C2 & 68C3
Flying Training	1) Formal School or 2) AFMC Form 68C4	1) Formal School 1) AFMC Form 68C4
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A4.3. FTE Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NONCURRENT OVER 5 YEARS
Ground Training	AFMC Form 67C6 & 68C10	AFMC Form 67C6 & 68C10
Flying training	AFMC Form 68C11	AFMC Form 68C11
Aircrew Exams	Closed Book Exam	Closed Book Exam

A4.3. MISSION QUALIFICATION TRAINING.

A4.3.1. General. Refer to **Table A4.4.**, **Table A4.5.**, and **Table A4.6.** for minimum ground and flying training needed to qualify aircrew members in B-1 mission elements. AFMC prescribed B-1 mission qualification training includes Air Refueling, Low Level/TF, and Functional Check Flight (FCF) training.

A4.3.2. Air Refueling. **Table A4.4.** outlines the minimum ground and flying training required to qualify pilots in the air refueling mission. Pilots may complete qualification training from either seat. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted. Only basic aircraft instructor pilots are authorized to accomplish air refueling instructor training. Basic aircraft instructor and receiver instructor training may be conducted concurrently if the pilot is air refu-

eling qualified. Air Refueling training should expose the trainee to as wide a variety of gross weights and flight conditions as possible.

A4.3.2.1. A B-1 mission instructor of like specialty, who is current and qualified in air refueling as applicable will administer ground and flying training.

A4.3.2.2. Air refueling training may be accomplished from either seat and with a KC-10 or KC-135 tanker.

Table A4.4. Air Refueling Training Requirements.

REQUIREMENT	PILOT	WSO	INSTRUCTOR PILOT	INSTRUCTOR WSO
Ground Training	AFMC Form 67C3	AFMC Form 67C3	AFMC Form 67C3	AFMC Form 67C3
Flying Training	AFMC Form 68C5	AFMC Form 68C6	AFMC Form 68C5	AFMC Form 68C6
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A4.3.3. FCF Training. FCF training will be conducted IAW paragraph **3.4. Table A4.5.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete training from either seat.

A4.3.3.1. A B-1 mission instructor of like specialty, who is current and qualified in the FCF mission, will administer ground and flying training.

Table A4.5. FCF Training Requirements.

REQUIREMENT	PILOT	WSO
Ground Training	AFMC Form 67C7	AFMC Form 67C7
Flying Training	AFMC Form 68C9	AFMC Form 68C13
Aircrew Exams	As Required by unit CC	As Required by unit CC

A4.3.4. Low Level/TF Navigation Training. If the flying unit commander determines that Low Level/TF is a mission requirement, aircrews must complete a HQ AFMC approved Low Level/TF training program. Low Level/TF Navigation training will be conducted IAW paragraph **3.5. Table A4.6.** outlines the minimum ground and flying training needed to qualify aircrew members in the Low Level Navigation mission. Pilots may complete training from either seat.

A4.3.4.1. A B-1 mission instructor of like specialty, who is current and qualified in low level, will administer ground and flying training.

A4.3.4.2. Proficiency in day low level must be demonstrated before accomplishing night training.

Table A4.6. Low Level/TF Navigation Training Requirements.

REQUIREMENT	PILOT	WSO	INSTRUCTOR PILOT	INSTRUCTOR WSO
Ground Training	AFMC Form 67C4	AFMC Form 67C4	AFMC Form 67C4	AFMC Form 67C4
Flying Training	AFMC Form 68C7	AFMC Form 68C8	AFMC Form 68C7	AFMC Form 68C8
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A4.4. CONTINUATION TRAINING.

A4.4.1. General. In addition to the minimum requirements in **Table 7.** and **Table 8.** of this instruction, B-1 aircrew members will also accomplish the requirements in **Table A4.7.** and **Table A4.8.**. Flying unit commanders may determine additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this manual.

Table A4.7. Additional B-1 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Low Level (Visual Contour or TF)	1/120
	Air Refueling Contact	1/120
	FCF Sortie	1/180
OSO/WSO	Low Level (Visual Contour or TF)	1/120
	Air Refueling Rendezvous	1/120
	FCF Sortie	1/180
DSO/WSO	Electronics Counter Measures (notes 1,2)	1/90
FTE	Sortie	1/60

NOTES:

1. As applicable to the unit mission.

2. May be accomplished in the simulator.

Table A4.8. Additional B-1 Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
PILOT	Low Level (Visual Contour or TF)	3	3	3	2	1	1
	Air Refueling Contact	2	2	2	1	1	1
	Air Refueling Breakaway	1	1	1	1	1	1
	No Flap Approach and Landing	1	1	1	1	1	1
OSO/WSO	Low Level (Visual Contour or TF)	2	2	2	1	1	1

A4.4.2. Air Refueling Requirements. Pilots and WSOs exceeding air refueling currency requirements in **Table A4.7.** may regain currency by accomplishing a contact/rendezvous event under the direct supervision of an instructor. Loss of currency exceeding two months requires the applicable training in **Table A4.4.**

A4.4.3. FCF Requirements. Pilots and WSOs exceeding FCF currency requirements in **Table A4.7.** may regain currency by accomplishing a FCF sortie event under the direct supervision of an instructor. Loss of currency exceeding six months requires the applicable training in **Table A4.5.**

A4.4.4. Low Level/TF Navigation Requirements. Pilots and WSOs exceeding low level currency requirements in **Table A4.7.** may regain currency by accomplishing a low level navigation event under the direct supervision of an instructor. Loss of currency exceeding two months requires the applicable training in **Table A4.6.**

A4.5. UPGRADE TRAINING. Upgrade training will be conducted IAW paragraph **5.3. Table A4.9.** and this section outline the minimum ground and flying training required for aircraft commander upgrade, instructor upgrade and OSO/DSO cross training.

A4.5.1. Copilot to Aircraft Commander Upgrade. The primary method way to accomplish this training is at a formal school. If this is not practical, local upgrade training will consist of the ground, simulator, and flying training events specified in **Table A4.9.**

A4.5.2. Instructor Upgrade. Aircrew members selected for upgrade training to instructor status will complete the appropriate ground and flying training lesson plans specified in **Table A4.9.** Instructor OSO upgrade sorties must be flown from the DSO seat. .

A4.5.3. OSO/DSO Cross Training. The preferred method of gaining cross qualification status for either the OSO or DSO candidate is through formal course attendance. If attendance at a formal school is not practical, and if authorized by the flying unit commander, follow the appropriate ground and flying training specified in **Table A4.9.** Units may elect to develop a local OSO/DSO training course to train a cross qualification candidate to the necessary proficiency required to perform the unit mission.

Table A4.9. Upgrade Training Requirements.

REQUIREMENT	TO AIRCRAFT COMMANDER	TO INSTRUCTOR PILOT	TO INSTRUCTOR OSO/ DSO/WSO
Ground Training	1) Formal School 2) AFMC Form 67C1	1) Formal School 2) AFMC Form 67C1 & 68C1	1) Formal School 2) AFMC Form 67C2
Flying Training	1) Formal School 2) AFMC Form 68C2	1) Formal School 2) AFMC Form 68C2	1) Formal School 2) AFMC Form 68C4
Aircrew Exams	Open & Closed Book Exams	As required by unit CC	As Required by unit CC

A4.6. TRAINING RESTRICTIONS.

A4.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A4.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A4.8. B-1 TRAINING PLANS PRESCRIBED.

A4.8.1. General. B-1 prescribed training plans listed in **Table A4.10.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A4.10. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67C1 & 68C1 & 68C2
OSO/DSO/WSO Qualification & Requalification Training	AFMC Forms 67C2, 68C3 & 68C4
FTE Qualification & Requalification Training	AFMC Forms 67C6, 68C10 & 68C11
Pilot Air Refueling	AFMC Forms 67C3 & 68C5
OSO/DSO/WSO Air Refueling	AFMC Forms 67C3 & 68C6
Pilot Functional Check Flight	AFMC Forms 67C7 & 68C9
OSO/DSO/WSO Functional Check Flight	AFMC Forms 67C7 & 6813
Pilot Low Level/TF	AFMC Forms 67C4 & 68C7
OSO/DSO/WSO Low Level/TF	AFMC Forms 67C4 & 68C8
Aircraft Commander Upgrade	AFMC Forms 67C1 & 68C2
Instructor Pilot Upgrade	AFMC Forms 67A2, 67C1, 68C1 & C2
Instructor OSO/DOS/WSO Upgrade	AFMC Forms 67A2, 67C2, & 68C4
DSO/WSO ECM Training	AFMC Forms 67C8 & 68C12

Attachment 5

B-2 TRAINING GUIDELINES

A5.1. GENERAL .

A5.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC B-2 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1, as supplemented. It also prescribes additional B-2 continuation training requirements.

A5.1.2. Key Words and Definitions.

A5.1.2.1. Simulator: A B-2 Weapons System Trainer (WST) or Engineering Development Simulator (EDS).

A5.1.2.2. Low Level: Low level environment defined by this regulation is IAW paragraph **3.5.** of this instruction.

A5.1.2.3. Visual Contour Flight: Operation of the aircraft in the low level environment in a manual mode using visual references only.

A5.1.2.4. Automatic Terrain Following (ATF): Operation of the aircraft at or below 1000 feet AGL using the automatic terrain following (ATF) mode.

A5.1.2.5. Manual Terrain Following (MTF): Operation of the aircraft at or below 1000 feet AGL manually following terrain pitch steering cues.

A5.1.3. Aircrew Requirements and Qualifications.

A5.1.3.1. Pilot/WSO Requirements. The flying unit commander will determine the crew complement to include two pilot crews and pilot / Weapon System Officer (WSO) crews based on unit training requirements. Mission qualification training qualifies pilots to perform mission events from either seat. There is no requirement to log mission qualification or continuation training events in relation to the seat occupied. Training tables and lesson plans outlined in this attachment address training required for pilot and WSO crew positions.

A5.2. AIRCRAFT QUALIFICATION TRAINING.

A5.2.1. This section outlines prescribed initial and requalification training for pilot and WSO crew positions. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirement outlined in this instruction.

A5.2.2. Ground Training Requirements.

A5.2.2.1. Refer to **Table A5.1.** (pilot) and **Table A5.2.** (WSO) for qualification and requalification training requirements based on prior qualifications. With the exception of the open and closed book examinations, ground training will be completed prior to starting Phase I flying training.

A5.2.3. Flying Training Requirements.

A5.2.3.1. Refer to **Table A5.1.** (pilot) and **Table A5.2.** (WSO) for qualification and requalification training requirements based on prior qualifications. Local pilot qualification will consist of a minimum of three sorties. The first sortie will normally be flown from the left seat. The flight

evaluation may be flown from either seat. WSO qualification will consist of a minimum of two right seat sorties.

Table A5.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67D1 & 68D1	1) Formal School 2) AFMC Form 67D1& 68D1
Flying Training	1) Formal School or 2) AFMC Form 68D2	1) Formal School 2) AFMC Form 68D2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A5.2. WSO Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67D1 & 68D3	1) Formal School 2) AFMC Form 67D1 & 68D3
Flying Training	1) Formal School or 2) AFMC Form 68D4	1) Formal School 2) AFMC Form 68D4
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A5.3. MISSION QUALIFICATION TRAINING.

A5.3.1. General. Refer to **Table A5.3.**, **Table A5.4.**, and **Table A5.5.** for the minimum ground and flying training needed to qualify aircrew members in B-2 mission elements. AFMC prescribed B-2 mission qualification training includes Aerial Refueling, Weapons Delivery, Low Level/TF Navigation, and Flight Test Training. Additional unit specific mission training requirements will be established by the flying unit commander and included in the unit supplement to this instruction.

A5.3.2. Air Refueling. **Table A5.3.** outlines the minimum ground and flying training required to qualify pilots in the air refueling mission. Pilots may complete qualification training from either seat. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted. Only basic aircraft instructor pilots are authorized to accomplish air refueling instructor training. Basic aircraft instructor and receiver instructor training may be conducted concurrently if the pilot is air refueling qualified. Air Refueling training should expose the trainee to as wide a variety of gross weights and flight conditions as possible

A5.3.2.1. A B-2 mission instructor of like specialty, who is current and qualified in air refueling as applicable will administer ground and flying training.

A5.3.2.2. Air refueling training may be accomplished from either seat and with a KC-10 or KC-135 tanker.

Table A5.3. Air Refueling Training Requirements.

REQUIREMENT	RECEIVER PILOT	INSTR PILOT UPGRADE
Ground Training	AFMC Form 67D2	AFMC Form 67D2
Flying Training	AFMC Form 68D5	AFMC Form 68D5
Aircrew Exams	As Required by unit CC	As Required by unit CC

A5.3.3. Low Level/TF Navigation Training. If the flying unit commander determines that Low Level/ TF is a mission requirement, aircrews must complete a HQ AFMC approved Low Level/TF training program. Low Level/TF Navigation training will be conducted IAW paragraph **3.5. Table A5.4.** outlines the minimum ground and flying training needed to qualify aircrew members in the Low Level/ TF Navigation mission. Pilots may complete training from either seat

A5.3.3.1. A B-2 mission instructor of like specialty, who is current and qualified in low level/TF, will administer ground and flying training.

A5.3.3.2. Proficiency in day low level must be demonstrated before accomplishing night training.

Table A5.4. Low Level/TF NavigationTraining Requirements.

REQUIREMENT	PILOT	WSO	INSTRUCTOR PILOT	INSTRUCTOR WSO
Ground Training	AFMC Form 67D3	AFMC Form 67D3	AFMC Form 67D3	AFMC Form 67D3
Flying Training	AFMC Form 68D6	AFMC Form 68D7	AFMC Form 68D6	AFMC Form 68D7
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A5.3.4. Weapons Delivery Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8. Table A5.5.** outlines the minimum ground and flying training needed to qualify aircrew members in the Weapons Delivery. Pilots may complete training from either seat.

A5.3.4.1. A B-2 mission instructor of like specialty, who is current and qualified in Weapons Delivery will administer ground and flying training.

A5.3.4.2. Training may be accomplished in conjunction with Phase I or instructor training.

Table A5.5. Weapons Delivery Training Requirements.

REQUIREMENT	PILOT/WSO WEAPONS DELIVERY	INSTRUCTOR PILOT/WSO WEAPONS DELIVERY
Ground Training	AFMC Form 67D5	AFMC Form 67D5
Flying Training	AFMC Form 68D8	AFMC Form 68D8
Aircrew Proficiency Exams	As Required by unit CC	As Required by unit CC

A5.3.5. Flight Test Training. If the flying unit commander determines that flight test is a mission requirement, aircrews must complete a HQ AFMC prescribed/approved flight test training program.

Flight Test training will be conducted IAW paragraph **3.10. Table A5.6.** outlines the ground training required to qualify pilots in the Flight Test mission.

Table A5.6. Flight Test Training Requirements.

REQUIREMENT	PILOT FLIGHT TEST	WSO FLIGHT TEST
Ground Training	AFMC Form 67D4	AFMC Form 67D4
Flying Training	Not Required	Not Required
Aircrew Proficiency Exams	As Required by unit CC	As Required by unit CC

A5.4. CONTINUATION TRAINING.

A5.4.1. General: In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this inspection, B-2 aircrew members will also accomplish the requirements in **Table A5.7.** and **Table A5.8.** Flying unit commanders may determine additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this manual.

Table A5.7. Additional B-2 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Air Refueling Contact	1/120
Pilot/WSO	Low level (Visual Contour or Automatic / Manual Terrain Following)	1/120
	Weapons Delivery	1/180

Table A5.8. Additional B-2 Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
PILOT	Air Refueling Contact	2	2	2	1	1	1
	Air Refueling Breakaway	1	1	1	1	1	1
	Low Level (Visual Contour or TF)	2	2	2	1	1	1
WSO	Low Level (Visual Contour or TF)	2	2	2	1	1	1

A5.4.2. Air Refueling Requirements. Air refueling currency is maintained by accomplishing a contact IAW paragraph **4.4.6.1.** Pilots who exceed air refueling currency requirements in **Table A5.7.** may regain currency by accomplishing a contact under the direct supervision of a current and qualified air refueling instructor pilot. Loss of currency exceeding 2 months requires air refueling training IAW the requirements in **Table A5.3.**

A5.4.3. Low Level/TF Requirements. Low level currency is updated by flying 10 minutes of visual contour, or automatic/manual terrain following at 1000 feet or below. Aircrew members who exceed low level currency requirements in **Table A5.7.** may regain currency by accomplishing a low level mission under the direct supervision of current and qualified low level instructor. An AFMC approved

simulator may be used for recurrency at the discretion of the flying unit commander. Loss of currency exceeding 2 months requires low level training IAW **Table A5.4.**

A5.4.4. Weapons Delivery Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed Weapons Delivery currency requirements in **Table A5.7.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires Weapons Delivery mission qualification training IAW **Table A5.5.**

A5.5. UPGRADE TRAINING . Instructor upgrade training will be conducted IAW paragraph **5.3. Table A5.9.** outlines the minimum ground and flying training required for mission commander and instructor upgrade.

A5.5.1. Pilot Upgrade to Mission Commander. The primary method way to accomplish this training is at a formal school. If this is not practical, local upgrade training will consist of the ground, simulator, and flying training events specified in **Table A5.9.** .

A5.5.2. Instructor Pilot Upgrade. Instructor pilot upgrade training will consist of the ground and flying training specified in **Table A5.9.**

A5.5.3. Instructor WSO Upgrade. Instructor WSO (IWSO) upgrade training will consist of the ground and flying training specified in **Table A5.9.** Instructor WSO may instruct all B-2 events except pilot specific events (i.e. landings, air refueling, etc.) IAW paragraph **1.7.8.**

Table A5.9. Upgrade Training Requirements.

REQUIREMENT	TO MISSION COMMANDER	TO INSTRUCTOR PILOT	TO INSTRUCTOR OSO/DSO/WSO
Ground Training	1) Formal School 2) AFMC 67D1& 68D1	1) Formal School 2) AFMC 67D1	1) Formal School 2) AFMC 67D1
Flying Training	1) Formal School 2) AFMC 68D2	1) Formal School 2) AFMC 68D2	1) Formal School 2) AFMC 68D4
Aircrew Exams	Open & Closed Book Exams	Not Required	Not Required

A5.6. TRAINING RESTRICTIONS.

A5.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A5.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A5.8. B-2 TRAINING PLANS PRESCRIBED.

A5.8.1. General. B-2 prescribed training plans listed in **Table A5.10.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A5.10. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67D1, 68D1 & D2
WSO Qualification & Requalification Training	AFMC Forms 67D1, 68D3 & D4
Pilot Air Refueling	AFMC Forms 67D2 & 68D5
Pilot Low Level/TF	AFMC Forms 67D3 & 68D6
WSO Low Level/TF	AFMC Forms 67D3 & 68D7
Pilot/WSO Weapons Delivery	AFMC Forms 67D5 & 68D8
Pilot/WSO Flight Test	AFMC Form 67D4
Mission Commander	AFMC Forms 67D1 & 68D2
Pilot Instructor Upgrade Training	AFMC Forms 67A2, 67D1 & 68D2
WSO Instructor Upgrade Training	AFMC Forms 67A2, 67D1 & 68D4

Attachment 6

B-52 TRAINING GUIDELINES

A6.1. GENERAL.

A6.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC B-52 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional B-52 continuation training requirements.

A6.1.2. Key Words and Definitions.

A6.1.2.1. Navigator. The navigator position referenced in this attachment refers to both the B-52 navigator and radar navigator crew positions.

A6.1.3. Aircrew Requirements and Qualifications.

A6.1.3.1. Navigator Requirements. The flying unit commander will determine the crew complement based on unit training requirement. Mission qualification training qualifies pilots to perform mission events from either seat. There is no requirement to log mission qualification or continuation training events in relation to the seat occupied. Training tables and lesson plans outlined in this manual address training required for pilot and navigator crew positions. EWO procedures, if applicable, must be developed by the unit and incorporated into the unit's supplement.

A6.2. AIRCRAFT QUALIFICATION TRAINING.

A6.2.1. This section outlines prescribed initial and requalification training for pilot and navigator crew positions. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirements outlined in this instruction.

A6.2.2. Ground Training Requirements.

A6.2.2.1. Refer to **Table A6.1.** (pilot), **Table A6.2.** (navigator) and **Table A6.3.** (FTE) for qualification and requalification training requirements based on prior qualifications. With the exception of the open and closed book examinations, ground training will be completed prior to starting Phase I flying training.

A6.2.3. Flying Training Requirements.

A6.2.3.1. Refer to **Table A6.1.** (pilot) and **Table A6.2.** (navigator) for qualification and requalification training requirements based on prior qualifications.

Table A6.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67E1 & 68E1	1) Formal School 2) AFMC Form 67E1 & 68E1
Flying Training	1) Formal School or 2) AFMC Form 68E2	1) Formal School 2) AFMC Form 68E2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A6.2. Navigator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67E2 & 68E3	1) Formal School 2) AFMC Form 67E2 & 68E3
Flying Training	1) Formal School or 2) AFMC Form 68E4	1) Formal School 2) AFMC Form 68E4
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A6.3. FTE Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NONCURRENT OVER 5 YEARS
Ground Training	AFMC Form 67C8 & 68C12	AFMC Form 67C6 & 68C12
Flying training	AFMC Form 68C13	AFMC Form 68C13
Aircrew Exams	Closed Book Exam	Closed Book Exam

A6.3. MISSION QUALIFICATION TRAINING.

A6.3.1. General. Refer to **Table A6.4.**, **Table A6.5.**, and **Table A6.6.** for minimum ground and flying training needed to qualify aircrew members in B-52 mission elements. AFMC prescribed B-52 mission qualification training includes Air Refueling, Functional Check Flight (FCF), Low Level/TF Navigation, Weapons Delivery, and Flight Test training.

A6.3.2. Air Refueling Training. **Table A6.4.** outlines the minimum ground and flying training required to qualify pilots in the air refueling mission. Pilots may complete qualification training from either seat. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted. Only basic aircraft instructor pilots are authorized to accomplish air refueling instructor training. Basic aircraft instructor and receiver instructor training may be conducted concurrently if the pilot is air refueling qualified. Air refueling training should expose the trainee to as wide a variety of gross weights and flight conditions as possible.

A6.3.2.1. A B-52 mission instructor of like specialty, who is current and qualified in air refueling as applicable will administer ground and flying training.

A6.3.2.2. Air refueling training may be accomplished from either seat and with a KC-10 or KC-135 tanker.

Table A6.4. Air Refueling Training Requirements.

REQUIREMENT	PILOT	NAVIGATOR	INSTRUCTOR PILOT UPGRADE
Ground Training	AFMC Form 67E3	AFMC Form 67E3	AFMC Form 67E3
Flying Training	AFMC Form 68E5	AFMC Form 68E6	AFMC Form 68E6
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC

A6.3.3. FCF Training. FCF training will be conducted IAW paragraph **3.4. Table A6.5.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete training from either seat.

A6.3.3.1. A B-52 mission instructor of like specialty, who is current and qualified in the FCF mission will administer ground and flying training.

Table A6.5. FCF Training Requirements.

EVENT	PILOT	NAVIGATOR
Ground Training	AFMC Form 67E5	AFMC Form 67E5
Flying Training	AFMC Form 68E9	AFMC Form 68E10
Aircrew Exams	As Required by unit CC	As Required by unit CC

A6.3.4. Low Level/TF Navigation Training. If the flying unit commander determines that Low Level/TF is a mission requirement, aircrews must complete a HQ AFMC approved Low Level/TF training program. Low Level/TF Navigation training will be conducted IAW paragraph **3.5. Table A6.6.** outlines the minimum ground and flying training needed to qualify aircrew members in the Low Level/TF Navigation mission. Pilots may complete training from either seat

A6.3.4.1. A B-52 mission instructor of like specialty, who is current and qualified in low level/TF will administer ground and flying training.

A6.3.4.2. Proficiency in day low level must be demonstrated before accomplishing night training.

Table A6.6. Low Level/TF Training Requirements.

REQUIREMENT	PILOT	NAVIGATOR	INSTRUCTOR PILOT	INSTRUCTOR NAVIGATOR
Ground Training	AFMC Form 67E4	AFMC Form 67E4	AFMC Form 67E4	AFMC Form 67E4
Flying Training	AFMC Form 68E7	AFMC Form 68E8	AFMC Form 68E7	AFMC Form 68E8
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A6.3.5. Weapons Delivery Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC prescribed/approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8. Table A6.7.** outlines the minimum ground and flying training needed to qualify aircrew members in the Weapons Delivery. Pilots may complete training from either seat.

A6.3.5.1. A B-52 mission instructor of like specialty, who is current and qualified in Weapons Delivery will administer ground and flying training.

A6.3.5.2. Training may be accomplished in conjunction with Phase I or instructor training.

Table A6.7. Weapons Delivery and Flight Test Training Requirements.

REQUIREMENT	PILOT/NAVIGATOR WEAPONS DELIVERY	PILOT/NAVIGATOR FLIGHT TEST	INSTRUCTOR PILOT/NAVIGATOR WEAPONS DELIVERY
Ground Training	AFMC Form 67E6	AFMC Form 67E7	AFMC Form 67E6
Flying Training	AFMC Form 68E11	Not Required	AFMC Form 68E11
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC

A6.4. CONTINUATION TRAINING.

A6.4.1. General. In addition to the minimum requirements in **Table 7.** and **Table 8.** of this instruction, B-52 aircrew members will also accomplish the requirements in **Table A6.8.** and **Table A6.9.** Flying unit commanders may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this manual.

Table A6.8. Additional Currency Requirements.

POSITION	TRAINING EVENT	NUMBER/FREQUENCY
Pilot	Air Refueling Contact	1/120
Pilot/Navigator	FCF	1/180
	Low-level (EVS/Visual or TA)	1/120
	Weapons Delivery	1/180
Navigator	Air Refueling Rendezvous	1/180

Table A6.9. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Simulated Engine Failure on Takeoff	1	1	1	1	1	1
	Low Level (EVS/Visual or TA)	3	3	2	2	1	1
	Air Refueling Contact	2	2	2	1	1	1
	Air Refueling Breakaway	1	1	1	1	1	1
	6-Engine Approach and Landing	2	2	2	1	1	1
	No Flap Touch and Go Landing	2	2	2	1	1	1
	6-Engine Missed Approach	2	2	2	1	1	1
	Pilot Proficiency Sortie	1	1	1	1	1	1
Navigator	Low Level (EVS/Visual or TA)	2	2	2	1	1	1

A6.4.2. Pilot Proficiency Sortie. Pilots may log proficiency sortie, as required in **Table A6.9.** provided they actively control the aircraft for a minimum of 0.5 hours of primary time and accomplish, as a minimum, the events listed below. Emphasize system malfunctions and asymmetric thrust operations (e.g., 6-engine approach, flaps up approach, engine loss on takeoff):

A6.4.2.1. Two instrument approaches (precision and non-precision).

A6.4.2.2. Visual pattern.

A6.4.2.3. Landing.

A6.4.2.4. Missed approach.

A6.4.3. Air Refueling Requirements. Air refueling currency is maintained by accomplishing a contact IAW paragraph **4.4.6.1.** Pilots and navigators who exceed air refueling currency requirements in **Table A6.8.** may regain currency by accomplishing a contact under the direct supervision of a current and qualified air refueling instructor. Loss of currency exceeding 2 months requires air refueling training IAW the requirements in **Table A6.4.**

A6.4.4. FCF Requirements. Pilots and WSOs exceeding FCF currency requirements in **Table A6.8.** may regain currency by accomplishing a FCF sortie event under the direct supervision of an instructor. Loss of currency exceeding six months requires the applicable training in **Table A6.5.**

A6.4.5. Low Level/TF Navigation Requirements. Pilots and WSOs exceeding low level currency requirements in **Table A6.8.** may regain currency by accomplishing a low level navigation event under the direct supervision of an instructor. Loss of currency exceeding two months requires the applicable training in **Table A6.6.**

A6.4.6. Weapons Delivery Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed Weapons Delivery currency requirements in **Table A6.8.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires Weapons Delivery mission qualification training IAW **Table A6.7.**

A6.5. UPGRADE TRAINING.

Upgrade training will be conducted IAW paragraph **5.3. Table A6.10.** outlines the minimum ground and flying training required for mission commander and instructor upgrade.

A6.5.1. Pilot Upgrade to Mission Commander. The primary method way to accomplish this training is at a formal school. If this is not practical, local upgrade training will consist of the ground, simulator, and flying training events specified in **Table A6.10.**

Table A6.10. Upgrade Training Requirements.

REQUIREMENT	TO MISSION COMMANDER	TO INSTRUCTOR PILOT	TO INSTRUCTOR NAVIGATOR
Ground Training	1) Formal School 2) AFMC Form 67E1	1) Formal School 2) AFMC Form 67E1	1) Formal School 2) AFMC Form 67E2
Flying Training	1) Formal School 2) AFMC Form 68E2	1) Formal School 2) AFMC Form 68E4	1) Formal School 2) AFMC Form 68E4
Aircrew Exams	Open & Closed Book Exams	As required by unit CC	As Required by unit CC

A6.6. TRAINING RESTRICTIONS.

A6.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A6.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A6.8. B-52 TRAINING PLANS PRESCRIBED.

A6.8.1. General. B-52 prescribed training plans listed in **Table A6.11.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A6.11. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67E1 & 68E1 & E2
Navigator Qualification and Requalification Training	AFMC Forms 67E2 & 68E3 & E4
FTE Qualification Training	AFMC Forms 67E8, 68E12 & 68E13
Pilot Air Refueling Training	AFMC Forms 67E3 & 68E5
Navigator Air Refueling Training	AFMC Forms 67E3 & 68E6
Pilot Low Level/TF	AFMC Forms 67E4 & 68E7
Navigator Low Level/TF	AFMC Forms 67E4 & 68E8
Pilot FCF Training	AFMC Forms 67E5 & 68E9
Navigator FCF Training	AFMC Forms 67E5 & 68E10
Pilot/Navigator Weapons Delivery Training	AFMC Forms 67E6 & 68E11
Pilot/Navigator Flight Test Training	AFMC Form 67E7
Mission Commander	AFMC Forms 67E1 & 68E2
Instructor Pilot	AFMC Forms 67A2, 67E1 & 68E2
Instructor Navigator	AFMC Forms 67A2, 67E2 & 68E4

Attachment 7

B-707 TRAINING GUIDELINES

A7.1. GENERAL.

A7.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC B-707 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional B-707 continuation training requirements.

A7.1.2. Key Words and Definitions.

A7.1.2.1. B-707. For the purpose of training required by this instruction, B-707 encompasses the category of all four engine military and civil aircraft based on the B-707-100/300 or 720 series aircraft to include the C-18, E-3, and E-8, etc.

A7.1.3. Aircrew Requirements and Qualifications.

A7.1.3.1. Navigator Requirements. The flying unit commander will determine the requirement for the unit navigator crew complement based on flight manual and unit training requirements. Training tables and lessons outlined in this instruction address training required for the traditional navigator crew position.

A7.1.3.2. Pilot Qualification. Pilots maintaining qualification in multiple B-707 category aircraft (C-18, E-3, E-8, etc) will not be considered for qualification into another MDS-aircraft (dual qualification).

A7.1.3.3. Navigator Qualification. The C-135 and B-707 (C-18, E-3, E-8, etc) are considered a single qualification upon completion of a flight evaluation in each aircraft or upon completion of applicable conversion training.

A7.2. AIRCRAFT QUALIFICATION TRAINING.

A7.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots, navigators, and flight engineers. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section.

A7.2.2. Ground Training Requirements.

A7.2.2.1. Refer to **Table A7.1.** (pilot), **Table A7.2.** (flight engineer), or **Table A7.3.** (navigator) for qualification and requalification training requirements based on prior qualifications. Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Emphasis should be placed on a thorough review of aircraft systems/equipment, cockpit orientation, and normal/emergency procedures. All systems and components not covered in training due to differences between the simulator and the B-707 being trained on will be covered in detail by an instructor during the aircraft visit.

A7.2.2.2. Simulator Training. Pilots and flight engineers will perform at least four simulator missions (4 hours/mission) prior to the initial qualification flight evaluation.

A7.2.3. Flying Training Requirements.

A7.2.3.1. Refer to **Table A7.1.** (pilot), **Table A7.2.** (flight engineer), or **Table A7.3.** (navigator) for qualification and requalification training requirements based on prior qualifications. Initial qualification flying training will be accomplished within the same B-707 category to maximum extent practical. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

Table A7.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67F1	1) Formal School 2) AFMC Form 67F1
Flying Training	1) Formal School or 2) AFMC Form 68F1	1) Formal School 2) AFMC Form 68F1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A7.2. Flight Engineer Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67F1	1) Formal School 2) AFMC Form 67F1
Flying Training	1) Formal School or 2)AFMC Form 68F2	1) Formal School 2) AFMC Form 68F2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A7.3. Navigator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67F2	1) Formal School 2) AFMC Form 67F2
Flying Training	1) Formal School or 2) AFMC Form 68F3	1) Formal School 2) AFMC Form 68F3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A7.2.4. Conversion Training.

A7.2.4.1. B-707 Conversion training is required for pilots/flight engineers to qualify in another B-707 category to include the C-18, E-3, E-8, etc. Pilots/flight engineers seeking qualification in

multiple categories must have an experience level of 2,000 hours total flying time with a combined total of 1,000 hours in a B-707 category. B-707 conversion training requirements are outlined in **Table A7.4.** (pilots), **Table A7.5.** (flight engineers), and **Table A7.6.** (navigators).

A7.2.4.2. The pilot and flight engineer positions in all B-707 aircraft are considered a single qualification upon completion of a qualification flight evaluation in each aircraft or upon completion of conversion training. Pilots and flight engineers maintaining qualification in two or more B-707 variants must take the qualification open and closed book examinations from each B-707 qualified as a requisite to the flight evaluation in their primary B-707, and complete MDS-specific egress training.

A7.2.4.3. B-707 conversion training is not required for navigators to qualify in another B-707 aircraft to include the C-18, E-3, E-8, etc. However, C-135 navigators may qualify in the B-707 by completing a flight evaluation in each aircraft or upon completion of the conversion training outlined in **Table A7.6.** Navigators maintaining qualification in both the C-135 and B-707 must take the qualification open and closed book examinations for both aircraft as a requisite to a flight evaluation in either aircraft and comply with MDS-specific egress training requirements.

A7.2.5. Difference Training.

A7.2.5.1. Difference training is required when differences within B-707 variants warrant specialized training. In addition to difference training requirements outlined **Table A7.4.** (pilots), **Table A7.5.** (flight engineers), and **Table A7.6.** (navigators), the DFO must ensure aircrew members are qualified and properly trained in the applicable normal procedures, emergency procedures, and crew duties for the aircraft and specific flight manual utilized for the mission flown.

Table A7.4. Pilot Conversion, Difference, and Upgrade Training Requirements.

REQUIREMENT	CONVERSION	DIFFERENCE
Ground Training	AFMC Form 67F1	AFMC Form 67F1
Flying Training	AFMC Form 68F1	As required by unit CC
Aircrew Exams	Open & Closed Book	As Required by unit CC

Table A7.5. Flight Engineer Conversion, Difference, and Upgrade Training Requirements.

REQUIREMENT	CONVERSION	DIFFERENCE
Ground Training	AFMC Form 67F1	AFMC Form 67F1
Flying Training	AFMC Form 68F2	As required by unit CC
Aircrew Exams	Open & Closed Book	As Required by unit CC

Table A7.6. Navigator Conversion, Difference, and Upgrade Training Requirements.

REQUIREMENT	CONVERSION	DIFFERENCE
Ground Training	AFMC Form 67F2	AFMC Form 67F2
Flying Training	AFMC Form 68F3	As Required by unit CC
Aircrew Exams	Open & Closed Book Exams	As Required by unit CC

A7.3. MISSION QUALIFICATION TRAINING.

A7.3.1. General. Refer to **Table A7.7.** and **Table A7.8.** for minimum ground and flying training needed to qualify aircrew members in B-707 mission elements. AFMC prescribed B-707 mission qualification training includes Air Refueling and FCF training.

A7.3.2. Air Refueling Training.

A7.3.2.1. **Table A7.7.** outlines the minimum ground and flying training required to qualify aircrew members in the air refueling mission. Pilots may complete qualification training from either seat. A contact may be credited for each 5 minutes of toggles engaged time on the boom. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted.

A7.3.2.2. To be a receiver AR qualified instructor, a pilot, flight engineer, or navigator must be instructor qualified in the basic aircraft. Only pilots require instructor upgrade training. Basic aircraft instructor pilot upgrade and air refueling instructor pilot upgrade training may be conducted concurrently. In this instance, the pilot must be receiver air refueling qualified prior to beginning instructor upgrade training. Receiver qualified pilots in the C-135 becoming qualified only need accomplish one training flight with a qualified AR instructor.

Table A7.7. Receiver Air Refueling Training Requirements.

REQUIREMENT	RECEIVER PILOT	RECEIVER FLT ENGINEER	RECEIVER NAVIGATOR	IP UPGRADE
Ground Training	AFMC Form 67F3	AFMC Form 67F3	AFMC Form 67F4	AFMC Form 67F3
Flying Training	AFMC Form 68F4	AFMC Form 68F5	AFMC Form 68F6	AFMC Form 68F4
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A7.3.3. Functional Check Flight (FCF) Training.

A7.3.3.1. FCF training will be conducted IAW paragraph **3.4. Table A7.8.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete qualification training from either seat. A B-707 instructor qualified in the FCF mission will administer ground and flying training.

Table A7.8. FCF Training.

REQUIREMENT	PILOT	FLIGHT ENGINEER	NAVIGATOR
Ground Training	AFMC Form 67F7	AFMC Form 67F8	AFMC Form 67F9
Flying Training	AFMC Form 68F7	AFMC Form 68F8	AFMC Form 68F9
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC

A7.4. CONTINUATION TRAINING.

A7.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, B-707 aircrew members will also accomplish the requirements in **Table A7.9.** and **Table A7.10.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a

supplement to this instruction. For navigators, qualification in the C-135, and B-707 aircraft is considered a single qualification for the purposes of currency and proficiency requirements upon completion of the applicable conversion training, or qualification flight evaluation.

Table A7.9. Basic Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/ FREQUENCY
B-707	Pilot	Conversion	1/180
		Receiver A/R Contact	1/120
		FCF Sortie	1/180
	Navigator	Conversion	1/180
		Receiver A/R Rendezvous	1/120
	Flight Engineer	Conversion	1/180
		FCF Sortie	1/180

Table A7.10. Semi Annual Basic Proficiency Training Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	MONTHS AVAILABLE					
			6	5	4	3	2	1
			NUMBER REQUIRED					
B-707	Pilot	Sim Eng Fail on T/O(1)	2	2	2	1	1	1
		Sim Eng Out Missed Approach	2	2	2	1	1	1
		Sim Eng Out Landing	2	2	2	1	1	1
		Night Receiver AR/Contact	1	1	1	1	1	1
		Air Refueling Breakaway	1	1	1	1	1	1
		Proficiency Sortie	2	2	2	1	1	1
	Navigator	Receiver AR/Rendezvous	1	1	1	1	1	1

NOTE:

1. Less E-3 if accomplished during annual simulator refresher training.

A7.4.1.1. For pilots and flight engineers, qualification in all B-707 variants are considered a single qualification for currency and proficiency requirements upon completion of the applicable conversion training or qualification flight evaluation.

A7.4.1.2. For navigators, the C-135 and B-707 is considered a single qualification for the purposes of maintaining currency and proficiency upon completion of conversion training, or qualification flight evaluation.

A7.4.2. Pilot Proficiency Sortie. Pilots may log a proficiency training sortie, as established in **Table A7.9.**, if they actively control the aircraft for a minimum of 0.5 hours of primary time and accomplish at least five different events from the following list:

A7.4.2.1. Takeoff or departure.

A7.4.2.2. Penetration or en route descent.

A7.4.2.3. Precision approach.

A7.4.2.4. Non-precision approach.

A7.4.2.5. Simulated emergency procedure.

A7.4.2.6. VFR pattern.

A7.4.2.7. Landing or touch-and-go.

A7.4.2.8. Holding.

A7.4.2.9. Airwork.

A7.4.2.10. Receiver Air Refueling.

A7.4.2.11. Circling Approach.

A7.4.2.12. Missed Approach.

A7.4.3. Conversion Currency Requirements. Pilot and flight engineer conversion training currency is maintained by logging a sortie every 180 days in each B-707 variant they are qualified. Navigator conversion training currency is maintained by logging a sortie every 180 days in each aircraft (C-135, B-707) in which the qualification is held.

A7.4.3.1. If B-707 pilots/flight engineers cannot maintain AFMC prescribed currency requirements (**Table 7.**) in their variant, the squadron commander or operations officer, on a case-by-case basis, may authorize currency to be maintained in any B-707 variant The following requirements must be met:

A7.4.3.1.1. The aircraft to be used must have similar avionics equipment.

A7.4.3.1.2. Accomplish pilot phase I ground training applicable to the aircraft to be flown.

A7.4.3.1.3. Be supervised by a qualified IP at a set of flight controls.

A7.4.3.1.4. Use FP duty code on the AFTO Form 781.

A7.4.3.1.5. These events can be counted toward semiannual training requirements.

A7.4.3.2. The flying unit commander or operations officer, on a case-by-case basis, may authorize a C-135 airframe be used. If the pilot is not qualified in the C-135 airframe, the following requirements must be met:

A7.4.3.2.1. The pilot must have 2000 hours total flying time with at least 1000 hours in the

B-707 or C-135.

A7.4.3.2.2. Accomplish pilot phase I ground training applicable to the aircraft to be flown.

A7.4.3.2.3. Be supervised by a qualified IP at a set of flight controls.

A7.4.3.2.4. Use an XP duty code on the AFTO Form 781.

A7.4.3.2.5. Not log events toward semiannual training requirements.

A7.4.4. Conversion Recurrency Requirements. Aircrew members who exceed conversion currency requirements in **Table A7.9.** may regain currency by flying with an instructor on the applicable aircraft. Loss of currency exceeding 6 months requires conversion training IAW with requirements in **Table A7.4.** (pilot), **Table A7.5.** (flight engineer), **Table A7.6.** (navigator) as applicable.

A7.4.5. Receiver Air Refueling Currency.

A7.4.5.1. Pilots may update receiver air refueling currency in any C-135/B-707 aircraft in which qualified. However, if the pilot is not qualified in the C-135, the following restrictions apply:

A7.4.5.1.1. Complete pilot qualification ground training IAW **Table A12.1.**

A7.4.5.1.2. Under direct supervision of a receiver qualified instructor pilot.

A7.4.5.1.3. Access to flight controls only during receiver refueling training.

A7.4.5.2. Pilots dual qualified in the C-135/B-707 aircraft and also receiver air refueling qualified in both aircraft may accomplish currency and proficiency receiver air refueling training events in either aircraft.

A7.4.5.3. Navigator air refueling currency is maintained by accomplishing a tanker or receiver rendezvous. Either rendezvous satisfies the requirements in A7.9. and A7.10.

A7.4.6. Receiver Air Refueling Recurrency.

A7.4.6.1. Pilots exceeding receiver air refueling currency requirements in **Table A7.9.** may regain currency by accomplishing a day or night contact under the direct supervision of a receiver qualified instructor pilot. Loss of currency exceeding 2 months requires Receiver Air Refueling training IAW **Table A7.7.** as applicable.

A7.4.6.2. Navigator air refueling currency is maintained by accomplishing a rendezvous. Navigators exceeding air refueling currency requirements in **Table A7.9.** may regain currency by accomplishing at least one in-flight air refueling rendezvous under the supervision of a current air refueling qualified instructor navigator. Loss of currency exceeding 2 months requires Receiver Air Refueling training IAW **Table A7.7.** as applicable.

A7.4.7. FCF Requirements. FCF currency is maintained by accomplishing an FCF sortie every 180 days. Aircrew members who exceed FCF currency requirements in **Table A7.9.** may regain currency by accomplishing an FCF sortie/profile with current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF training IAW with requirements in **Table A7.8.** as applicable.

A7.5. UPGRADE TRAINING.

A7.5.1. Instructor Upgrade. Instructor upgrade training will be conducted IAW paragraph **5.3. Table A7.11.** outlines the minimum ground and flying training required for instructor upgrade.

Table A7.11. Instructor Upgrade Training.

EVENT	PILOT	FLIGHT ENGINEER	NAVIGATOR
Ground Training	1)Formal School 2)AFMC Form 67F1	1)Formal School 2)AFMC Form 67F1	1)Formal School or 2)AFMC Form 67F2
Flying Training	1)Formal School 2)AFMC Form 68F1	1)Formal School 2)AFMC Form 68F2	1)Formal School 2)AFMC Form 68F3
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC

A7.6. TRAINING RESTRICTIONS.

A7.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A7.7. ADDITIONAL TRAINING.

A7.7.1. General. Since this instruction includes all B-707 variants, military, civil, and multiple configurations, this chapter will be used only as a guide. All flight manual procedures (if available) take precedence over this instruction, and will be reviewed prior to accomplishing any maneuvers inflight. Use this chapter when the information is not covered in a flight manual specific to the B-707. This guidance is to accomplish training and instructor pilot demonstration maneuvers in a basic B-707. The condition and process sections of this chapter should be used as a guide when performing the maneuvers. The technique sections are only *suggested* methods of performing the maneuvers. Unless briefed otherwise, make recoveries from maneuvers to straight and level flight at an indicated airspeed of at least 250 knots. Return the aircraft to a stable configuration after each training scenario. Instructor supervision is defined in paragraph **1.7.8.** The PIC will brief all crewmembers over interphone before starting the maneuvers.

A7.7.2. Steep Turns.

A7.7.2.1. Purpose.

A7.7.2.1.1. To develop instrument crosscheck.

A7.7.2.1.2. To practice control techniques.

A7.7.2.1.3. To increase instrument proficiency.

A7.7.2.2. Recommended Conditions:

A7.7.2.2.1. At least 10,000 feet AGL.

A7.7.2.2.2. Airspeed - 250 KIAS.

A7.7.2.2.3. 45° bank angle.

A7.7.2.3. Process.

A7.7.2.3.1. Clear area.

A7.7.2.3.2. Rate of roll is the same for normal turns.

A7.7.2.3.3. Stabilize in level straight flight at 250 KIAS before beginning maneuver.

A7.7.2.3.4. Use power as necessary to maintain airspeed.

A7.7.2.4. Techniques.

A7.7.2.4.1. Emphasize use of trim and rapid cross-check.

A7.7.2.4.2. Technique: Trim at 20°, 30°, 40° of bank

A7.7.2.4.3. Practice until hands off. Note relationship of bank to drag.

A7.7.3. Landing Attitude Demonstration.

A7.7.3.1. Purpose.

A7.7.3.1.1. To establish and hold the landing attitude picture long enough to observe all visual cues.

A7.7.3.2. Conditions.

A7.7.3.2.1. Normal touch-and-go procedures apply, except ground contact is optional.

A7.7.3.2.2. Maneuver terminates with go-around procedures.

A7.7.3.2.3. Instructor pilot supervision required.

A7.7.3.3. Process.

A7.7.3.3.1. Maintain the final approach power setting (or add power if needed) and set landing attitude just above the runway.

A7.7.3.3.2. Hold level pitch attitude constant, noting the relative movement, peripheral and horizon cues at the end of the runway.

A7.7.3.3.3. At no less than 2000 feet remaining, advance the power to go-around thrust and initiate normal climbout to traffic pattern altitude.

A7.7.3.3.4. If runway contact is made, re-establish attitude and power to remain off the runway or initiate a go-around.

A7.7.3.3.5. The maneuver terminates with a go-around.

A7.7.3.4. Techniques:

A7.7.3.4.1. With flaps-20, maintain appropriate pattern speed on downwind and note position of the horizon. Mark the position of the horizon with a grease pencil or a bug spot. This picture approximates the same landing attitude position of the horizon during normal landings.

A7.7.3.4.2. Point out center line T and landing attitude reference marks.

A7.7.3.4.3. Discuss the use of rudder to keep the aircraft pointed straight down the runway.

A7.7.3.4.4. Discuss control of drift across the runway using ailerons for control.

A7.7.3.4.5. The most effective demo is accomplished at speeds between touchdown and reference speed.

A7.7.4. Trim Demonstration.

A7.7.4.1. Purpose.

A7.7.4.1.1. To demonstrate the three methods to trim the elevator.

A7.7.4.1.2. To show control column displacement in out of trim conditions.

A7.7.4.1.3. To demonstrate manual trim techniques.

A7.7.4.1.4. To show autopilot trim is independent of the normal stabilizer trim system.

A7.7.4.2. Conditions.

A7.7.4.2.1. Clear of clouds.

A7.7.4.2.2. Instructor pilot supervision required.

A7.7.4.3. Process.

A7.7.4.3.1. Out of trim/manual trim demonstration.

A7.7.4.3.1.1. Trim for straight and level flight. Note the column in the center position and relationship to the sliding window handle.

A7.7.4.3.1.2. Trim 1 unit nose down, while maintaining level flight. Note control column displacement toward aft, reducing the elevator authority available.

A7.7.4.3.1.3. Trim an additional 2 to 3 units nose down and demonstrate that level flight can still be maintained.

A7.7.4.3.1.4. Stabilizer trim switch - CUT OUT.

A7.7.4.3.1.5. Maintain level flight with the elevator and have the student try to trim the aircraft using the manual trim wheel. Show the student manual trim forces are reduced by unloading the elevator control pressures.

A7.7.4.3.1.6. Stabilizer trim switch - ON.

A7.7.4.3.2. Autopilot Trim Procedures:

A7.7.4.3.2.1. Stabilizer trim switch – CUT OUT.

A7.7.4.3.2.2. Manually trim for approximately 500 feet per minute rate of climb.

A7.7.4.3.2.3. Engage all axis of the autopilot, including the altitude hold function.

A7.7.4.3.2.4. Note that the autopilot will trim the aircraft back to level flight using the autopilot pitch trim motor.

A7.7.4.3.2.5. Disconnect the altitude hold function and trim the aircraft up and down using the pitch controller.

A7.7.4.3.2.6. Stabilizer Trim Switch - NORMAL.

A7.7.5. Simulated Jammed Stabilizer.

A7.7.5.1. Purpose. To show the use and effectiveness of spoilers and split flaps for pitch trim in the event of a jammed stabilizer. This maneuver may be accomplished on a full stop landing or a touch-and go.

A7.7.5.2. Conditions.

A7.7.5.2.1. Leave stabilizer trim cutout switch in normal.

A7.7.5.2.2. May be accomplished day or night, clear of clouds.

A7.7.5.2.3. Instructor pilot supervision required.

A7.7.5.3. Process.

A7.7.5.3.1. The airplane is usually at airspeeds above V_{REF} and with flaps up, so nose down trim configuration is usually demonstrated for approach with flaps down. However, nose up trim may also be demonstrated.

A7.7.5.3.2. Follow flight manual emergency procedure guidance to trim for approach and landing.

A7.7.5.3.3. If accomplishing a touch and go, the reconfiguration of switches and CBs will be discussed during approach/touch and go briefings.

A7.7.6. Lateral Control (Spoiler) Demonstration.

A7.7.6.1. Purpose.

A7.7.6.1.1. To demonstrate the roll rate and aileron forces required for different spoiler settings.

A7.7.6.1.2. To demonstrate the reduced lateral control effectiveness after spoiler or hydraulic malfunctions.

A7.7.6.2. Conditions.

A7.7.6.2.1. Clear of clouds.

A7.7.6.2.2. Instructor supervision is required.

A7.7.6.3. Process.

A7.7.6.3.1. Make 30° bank turns noting the roll rates and aileron forces required during roll in and out of turns under the following conditions:

A7.7.6.3.2. All spoilers - on, speed brake - 0°.

A7.7.6.3.3. Inboard spoilers - cut out, outboards – normal.

A7.7.6.3.4. Outboard spoilers - cutout, inboards – normal.

A7.7.6.3.5. All spoilers - cut out.

A7.7.6.3.6. All spoilers - on, speed brakes - 30°.

A7.7.6.3.7. All spoilers - on, speed brakes - 60°.

A7.7.6.4. Techniques:

A7.7.6.4.1. Use the same, relatively rapid roll rates for all configurations.

A7.7.6.4.2. Use same control wheel deflection.

A7.7.6.4.3. Let the student fly the aircraft.

A7.7.6.4.4. Discuss landing considerations with partial or all spoilers inoperative.

A7.7.6.4.5. Note tendency to over control at 30° speed brakes.

A7.7.6.4.6. Watch airspeed with speed brakes extended because of increased drag.

A7.7.7. Approach to Stick Shaker.

A7.7.7.1. Purpose.

A7.7.7.1.1. Familiarization of B-707 aircraft flight characteristics.

A7.7.7.1.2. To teach and practice stick shaker recovery techniques.

A7.7.7.1.3. Show relationship between pitch, stick shaker onset and stall.

A7.7.7.2. Conditions.

A7.7.7.2.1. Daylight only.

A7.7.7.2.2. Altitude: above 10,000 feet AGL.

A7.7.7.2.3. Rudder power - ON. Series yaw damper- ON.

A7.7.7.2.4. No malfunctions in systems affecting aircraft control.

A7.7.7.2.5. Instructor pilot supervision required.

A7.7.7.3. Process.

A7.7.7.3.1. Compute and post - MCT, V_{REF}, Approach, Stick Shaker, Initial Buffet and Stall speeds.

A7.7.7.3.2. Continue to trim off elevator pressures until computed approach or reference speed (as appropriate) while maintaining altitude.

A7.7.7.3.3. Discuss pitch, stick shaker onset and stall relationship during entry

A7.7.7.3.4. Discuss performance manual chart speed basis of a smooth 1 knot/second deceleration rate, and 16 percent CG. A faster entry rate could cause the shaker speed to be lower than charted speed.

A7.7.7.3.5. Discuss affects of aircraft CG aft of 16 percent. The further aft CG the lower the shaker speed will be from charted value. With a CG of 16 percent as a ratio of 1.00; 20 percent is .993; 25 percent is .984; 30 percent is .974 of charted speeds.

A7.7.7.3.6. On stick shaker onset, or reaching charted stick shaker speed - recover

A7.7.7.3.7. Lower the nose slightly, apply go-around thrust, and maintain wings level. As the aircraft begins to accelerate and fly, smoothly raise the nose to maintain level flight and minimize altitude loss. Be cautious not to apply too much back-pressure to avoid secondary stick shaker onset or slowing into an actual stall.

A7.7.8. Slow Flight.

A7.7.8.1. Purpose. To show the slow speed handling characteristics of the B707 M/D/S aircraft.

A7.7.8.2. Conditions.

A7.7.8.2.1. Clear of clouds.

A7.7.8.2.2. Minimum altitude - 10,000 feet AGL.

A7.7.8.2.3. Maximum altitude - 20,000 feet MSL.

A7.7.8.2.4. Instructor pilot supervision required.

A7.7.8.3. Process.

A7.7.8.3.1. Compute and post: MCT, V_{REF}, and stick shaker speed.

A7.7.8.3.2. Configure the aircraft with flaps and gear.

A7.7.8.3.3. Maintain speed between V_{REF} + appropriate additive and stick shaker speed.

A7.7.8.3.4. Maintain altitude and speed while executing turns using 10° and 20° of bank demonstrating the slow speed handling characteristics of the aircraft.

A7.7.9. Unusual Attitude Recoveries.

A7.7.9.1. Purpose. To demonstrate proper recovery techniques from unusual attitudes.

A7.7.9.2. Conditions.

A7.7.9.2.1. Maneuver must be initiated above 10,000 feet AGL and completed no lower than 5000 feet AGL.

A7.7.9.2.2. Prohibited at night or during IMC.

A7.7.9.2.3. Instructor pilot supervision required.

A7.7.9.3. Process.

A7.7.9.3.1. According to the flight manual and AFMAN 11-217, Volume 1, *Instrument Flight Procedures.*

A7.8. B-707 TRAINING PLANS PRESCRIBED.

A7.8.1. General. B-707 prescribed training plans listed in **Table A7.11.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A7.12. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67F1 & 68F1
Flight Engineer Qualification & Requalification Training	AFMC Forms 67F1 & 68F2
Navigator Qualification & Requalification Training	AFMC Forms 67F2 & 68F3
Pilot Conversion Training	AFMC Forms 67F1 & 68F1
Flight Engineer Conversion Training	AFMC Forms 67F1 & 68F2
Navigator Conversion Training	AFMC Forms 67F2 & 68F3
Pilot Air Refueling Qualification & Instructor Upgrade Training	AFMC Forms 67F3 & 68F4
Flight Engineer Air Refueling Training	AFMC Forms 67F3 & 68F5
Navigator Air Refueling Training	AFMC Forms 67F4 & 68F6
Pilot FCF Training	AFMC Forms 67F7 & 68F7
Flight Engineer FCF Training	AFMC Forms 67F8 & 68F8
Navigator FCF Training	AFMC Forms 67F9 & 68F9
Pilot Instructor Upgrade Training	AFMC Forms 67F1 & 68F1
Flight Engineer Instructor Upgrade Training	AFMC Forms 67F1 & 68F2
Navigator Instructor Upgrade	AFMC Forms 67F2 & 68F3

Attachment 8

C-5 TRAINING GUIDELINES

A8.1. GENERAL.

A8.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-5 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-5 continuation training requirements.

A8.2. AIRCRAFT QUALIFICATION TRAINING.

A8.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots and flight engineers. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section.

A8.2.2. Ground and Flying Training Requirements.

A8.2.2.1. Refer to **Table A8.1.** (pilot), **Table A8.2.** (flight engineer) for qualification and requalification training requirements based on prior qualifications. Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Pilot initial qualifications will be as first pilot or aircraft commander at the discretion of the flying unit commander, based on the crewmember's prior experience. Local requalification training will be tailored to the individual after considering the experience and length of time out of the aircraft. If appropriate, the flying unit commander may recommend proficiency simulators or a formal school requalification training course. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

A8.2.2.2. Simulator Training. Simulator training is required and will be conducted IAW paragraph **2.3.2.**

Table A8.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67G1 & 68G1	1) Formal School 2) AFMC Form 67G1 & 68G1
Flying Training	1) Formal School or 2) AFMC Form 68G2	1) Formal School 2) AFMC Form 68G2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A8.2. Flight Engineer Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1)Formal School 2) AFMC Form 67G1	1)Formal School 2) AFMC Form 67G1
Flying Training	1)Formal School or 2) AFMC Form 68G3	1)Formal School 2) AFMC Form 6G3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A8.3. MISSION QUALIFICATION TRAINING.

A8.3.1. General. Refer to **Table A8.3.** and **Table A8.4.**. for minimum ground and flying training needed to qualify aircrew members in C-5 mission elements. AFMC prescribed C-5 mission qualification training includes FCF and Flight Test training.

A8.3.1.1. Pilots must be aircraft commander qualified prior to entering mission qualification training.

A8.3.2. Functional Check Flight (FCF) Training.

A8.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A8.3.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete qualification training from either seat. A C-5 instructor qualified in the FCF mission will administer ground and flying training.

Table A8.3. FCF Training.

REQUIREMENT	PILOT	FLIGHT ENGINEER/ SCANNER
Ground Training	AFMC Form 67G2 & 68G4	AFMC Form 67G3 & 68G6
Flying Training	AFMC Form 68G5	AFMC Form 68G7
Aircrew Exams	As required by unit CC	As required by unit CC

A8.3.2.2. Simulator Training Requirements. FCF mission qualification simulator or Cockpit Procedural Trainer (CPT) training is not required prior to beginning flying training, except as directed by paragraph **3.4.2.**, but will be completed as early as possible.

A8.3.3. Flight Test Training.

A8.3.3.1. Flight Test training will be conducted IAW paragraph **3.10. Table A8.4.** outlines the minimum ground and flying training needed to qualify aircrew members in the Flight Test mission. A C-5 instructor qualified in the Flight Test mission will administer ground and flying training.

Table A8.4. Flight Test Training.

REQUIREMENT	PILOT	FLIGHT ENGINEER
Ground Training	AFMC Form 67G4	AFMC Form 67G4
Flying Training	Not Required	Not Required
Aircrew Exams	As required by unit CC	As required by unit CC

A8.4. CONTINUATION TRAINING.

A8.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-5 aircrew members will also accomplish the requirements in **Table A8.5.** and **Table A8.6.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A8.5. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/ FREQUENCY
C-5	Pilot	FCF Sortie	1/60
	Pilot/Flight Engineer	Flight Test Ground Training	1/180
	Flight Engineer	FCF Sortie	1/60

Table A8.6. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot, Copilot	Simulated Engine Out Missed Approach	1	1	1	1	1	1
	Simulated Engine Out Landing	1	1	1	1	1	1
	Holding	1	1	1	1	1	1
	No Flap Pattern and Landing	1	1	1	1	1	1

A8.4.2. FCF Currency/Proficiency Requirements. FCF currency is maintained by accomplishing an FCF sortie every 60 days IAW **Table A8.5.**

A8.4.2.1. Pilots accomplish a cross section of T.O. 1C-5A-6CF-1 systems checks to include a minimum of four in-flight checks from either the left or right seat.

A8.4.2.2. Flight engineers accomplish a cross section of T.O. 1C-5A-6CF-1 systems checks to include a minimum of two preflight and four in-flight checks while performing either flight engineer or scanner duties.

A8.4.2.3. Aircrew members who do not accomplish the required FCF proficiency sorties will not perform FCF system checks unless under the supervision of an instructor.

A8.4.3. FCF Recurrency Requirements. Aircrew members who exceed FCF currency requirements in **Table A8.5.** may regain currency by accomplishing an FCF sortie/profile with current/qualified FCF instructor. Loss of currency exceeding 4 months requires FCF training IAW with requirements in **Table A8.3.** as applicable.

A8.4.4. Flight Test Currency/Recurrency Requirements:

A8.4.4.1. Flight Test currency is maintained by accomplishing Flight Test qualification ground training every 180 days.

A8.4.4.2. Aircrew members who exceed Flight Test currency requirements will not perform Flight Test missions until this training is completed.

A8.5. UPGRADE TRAINING. Upgrade training will be conducted IAW paragraph **5.3. Table A8.7.** outlines the minimum ground and flying training required for aircraft commander, instructor pilot, and instructor flight engineer upgrade.

Table A8.7. Instructor Upgrade Training.

REQUIREMENT	AIRCRAFT COMMANDER	INSTRUCTOR PILOT	INSTRUCTOR FLIGHT ENGINEER
Ground Training	1)Formal School 2)AFMC Form 67G1	1)Formal School 2)AFMC Form 67G1	1)Formal School 2)AFMC Form 67G1
Flying Training	1)Formal School 2)AFMC Form 68G2	1)Formal School 2)AFMC Form 68G2	1)Formal School 2)AFMC Form 68G3
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC

A8.5.1. Aircraft Commander Upgrade. The primary method way to accomplish this training is at a formal school. If this is not practical, local upgrade training will consist of the ground and flying training events specified in **Table A8.7.**

A8.5.2. Instructor Pilot Upgrade. Instructor pilot upgrade training will consist of the ground and flying training specified in **Table A8.7.** Instructor pilot candidates will receive training while occupying the right seat.

A8.5.3. Instructor Flight Engineer Upgrade. Instructor Flight Engineer upgrade training will consist of the ground and flying training specified in **Table A8.7.** Flight engineers must have a minimum of 1500 total hours (750 in the C-5) to upgrade to instructor.

A8.6. TRAINING RESTRICTIONS.

A8.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A8.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A8.8. C-5 TRAINING PLANS PRESCRIBED.

A8.8.1. General. C-5 prescribed training plans listed in **Table A8.8.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A8.8. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67G1, 68G1 & G2
Flight Engineer Qualification & Requalification Training	AFMC Forms 67G1 & 68G3
Flight Test Training	AFMC Form 67G4
Pilot FCF Training	AFMC Forms 67G2, 68G4 & G5
FE/Scanner FCF Training	AFMC Forms 67G3, 68G6 & G7
Instructor Pilot Upgrade Training	AFMC Forms 67A2, 67G1 & 68G2
Instructor Flight Engineer Upgrade Training	AFMC Forms 67A2, 67G1 & 68G3

Attachment 9

C-12 TRAINING GUIDELINES

A9.1. GENERAL

A9.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-12 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-12 continuation training requirements.

A9.2. AIRCRAFT QUALIFICATION TRAINING.

A9.2.1. This section outlines prescribed initial and requalification training for the pilot crew position. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirement outlined in this instruction.

A9.2.2. Ground and Flying Training Requirements.

A9.2.2.1. Refer to **Table A9.1.** for qualification and requalification training requirements based on prior qualifications. Local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Initial qualifications will be as first pilot or aircraft commander at the discretion of the flying unit commander, based on the crewmember's prior experience. Local requalification training will be tailored to the individual after considering the experience and length of time out of the aircraft. If appropriate, the flying unit commander may recommend proficiency simulators or a formal school requalification training course. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

A9.2.2.2. Simulator Training. For local training ETCA formal simulator training is required and will be conducted IAW paragraph **2.3.2.**

Table A9.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67H1 & simulators	1) Formal School 2) AFMC Form 67H1 & simulators
Flying Training	1) Formal School or 2) AFMC Form 68H1	1) Formal School 2) AFMC Form 68H1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A9.2.3. Conversion Training.

A9.2.3.1. C-12 conversion training is required for pilots/flight engineers to qualify in another C-12 aircraft category to include: C-12C/D, C-12J, and B-200. Pilots seeking qualification in all three categories must have an experience level of 2,000 hours total flying time with a combined total of 1,000 hours in one or more C-12 categories. C-12 conversion training requirements are outlined in **Table A9.2.**

Table A9.2. Pilot Conversion Training Requirements.

TRAINING	CONVERSION TO C-12J	CONVERSION TO B-200
Ground Training	1) Formal School or 2) AFMC Form 67H7	1) Formal School 2) AFMC Form 67H6
Flying Training	1) Formal School or 2) AFMC Form 68H7	1) Formal School 2) AFMC Form 68H6
Aircrew Exams	Open and Closed-book	As Required by unit CC

A9.3. MISSION QUALIFICATION TRAINING.

A9.3.1. General. Refer to **Table A9.3.** for minimum ground and flying training required to qualify pilots in C-12 mission elements. AFMC prescribed C-12 missions include FCF, Photo/Safety Chase, Low Altitude Step Down Training (LASDT), and Personnel Airdrop.

A9.3.2. Functional Check Flight (FCF) Training. FCF training will be conducted IAW paragraph **3.4. Table A9.3.** outlines the minimum ground and flying training required to qualify a pilot in the FCF mission. All ground and flying training will be accomplished referencing the most current 1-C-12-6CF-1 checklist with a C-12 FCF qualified instructor pilot.

A9.3.3. Photo/Safety Chase Training. Photo/Safety Chase will be conducted IAW paragraph **3.6. Table A9.3.** outlines the minimum ground and flying training required to qualify pilots in the Photo/ Safety Chase mission.

A9.3.4. Low Altitude Step Down Training (LASDT). LASDT will be conducted IAW paragraph **3.7. Table A9.3.** outlines the minimum ground and flying training required to qualify a pilot in the LASDT mission.

A9.3.5. Personnel Airdrop Training. **Table A9.3.** outlines the minimum ground and flying training required to qualify pilots in the Personnel Airdrop mission.

Table A9.3. FCF, Chase, LASDT, and Personnel Airdrop Training Requirements.

REQUIREMENT	FCF	CHASE	LASDT	PERSONNEL AIRDROP
Ground Training	AFMC Form 67H5	AFMC Form 67H4	AFMC Form 67H3	AFMC Form 67H2
Flying Training	AFMC Form 68H5	AFMC Form 68H4	AFMC Form 68H3	AFMC Form 68H2
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required By unit CC

A9.4. CONTINUATION TRAINING.

A9.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-12 aircrew members will also accomplish the requirements in **Table A9.4.** and **Table A9.5.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A9.4. Additional C-12 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot, Copilot	Simulated Engine Out Missed Approach	1/180
	Simulated Engine Out Landing	1/180
	Simulated Engine Out Takeoff	1/180
	Conversion Sortie	1/180
	FCF Sortie	1/180
	Photo/Safety Chase Sortie	1/180
	LASDT	1/90
	Personnel Airdrop	1/180

Table A9.5. Additional C-12 Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot, Copilot	Simulated Engine Out Missed Approach	1	1	1	1	1	1
	Simulated Engine Out Landing	1	1	1	1	1	1
	Engine Failure immediately after takeoff	1	1	1	1	1	1
	Photo/Safety Chase	3	3	2	2	1	1
	Personnel Airdrop	1	1	1	1	1	1

A9.4.2. Conversion Currency Requirements. Pilot conversion training currency is maintained by logging a sortie every 180 days in each C-12 category (C-12C/D, C-12J, or B200) they are qualified.

A9.4.2.1. If C-12 pilots/flight engineers cannot maintain AFMC prescribed currency requirements (**Table 7.**) in their variant, the squadron commander or operations officer, on a case-by-case basis, may authorize currency to be maintained in any C-12 category. The following requirements must be met:

A9.4.2.1.1. The aircraft to be used must have similar avionics equipment.

A9.4.2.1.2. Accomplish pilot phase I ground training applicable to the aircraft to be flown.

A9.4.2.1.3. Be supervised by a qualified IP at a set of flight controls.

A9.4.2.1.4. Use FP duty code on the AFTO Form 781.

A9.4.2.1.5. These events can be counted toward semiannual training requirements.

A9.4.3. Conversion Recurrency Requirements. Aircrew members who exceed conversion currency requirements in **Table A9.4.** may regain currency by flying with an instructor on the applicable aircraft. Loss of currency exceeding 6 months requires conversion training IAW with requirements in **Table A9.2.**

A9.4.4. FCF Requirements. FCF currency is maintained by accomplishing an FCF sortie every 180 days. Aircrew members who exceed FCF currency requirements in **Table A9.4.** may regain currency

by accomplishing an FCF sortie/profile with current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF training IAW with requirements in **Table A9.3.** as applicable.

A9.4.5. Chase Currency/Recurrency Requirements. Chase Currency is maintained by accomplishing a Chase event every 180 days IAW paragraph **4.4.6.4.** Pilots who exceed currency requirements in **Table A9.4.** may regain currency by accomplishing a chase event under the supervision of a chase qualified instructor pilot IAW paragraph **4.4.6.4.2.** Loss of currency exceeding 6 months requires Chase mission qualification training IAW **Table A9.3.**

A9.4.6. LASDT Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A9.4.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A9.4.7. Air Drop Requirements. Pilots exceeding air drop currency requirements in **Table A9.4.** may regain currency by accomplishing a airdrop event under the direct supervision of an instructor. Loss of currency exceeding six months requires the applicable training in **Table A9.3.**

A9.5. UPGRADE TRAINING.

A9.5.1. Instructor Pilot Upgrade. Instructor upgrade training will be conducted IAW paragraph **5.3.** **Table A9.6.** outlines the minimum ground and flying training required for instructor upgrade. Pilots will receive training while occupying the right seat.

Table A9.6. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67H1
Flying Training	AFMC Form 68H1
Aircrew Exams	As required by unit CC

A9.6. TRAINING RESTRICTIONS.

A9.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A9.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A9.8. C-12 TRAINING PLANS PRESCRIBED.

A9.8.1. General. C-12 prescribed training plans listed in **Table A9.7.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A9.7. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67H1 & 68H1
B-200 Conversion Training	AFMC Forms 67H6 & 68H6
C-12J Conversion Training	AFMC Forms 67H7 & 68H7
FCF Training	AFMC Forms 67H5 & 68H5
Photo/Safety Chase Training	AFMC Forms 67H4 & 68H4
LASDT	AFMC Forms 67H3 & 68H3
Personnel Airdrop Training	AFMC Forms 67H2 & 68H2

Attachment 10

C-17 TRAINING GUIDELINES

A10.1. GENERAL.

A10.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-17 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-17 continuation training requirements.

A10.1.2. Key Words and Definitions.

A10.1.3. Aircrew Requirements and Qualifications.

A10.1.3.1. Aircrew Requirements. The flying unit commander will determine the requirement for the aircrew complement to include a pilot, copilot, and loadmaster based on flight manual and unit training requirements. An additional qualified loadmaster may be required on personnel, CDS, heavy equipment and HALO airdrops.

A10.2. AIRCRAFT QUALIFICATION TRAINING.

A10.2.1. This section outlines prescribed initial and requalification training for the pilot crew position. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirements outlined in this instruction.

A10.2.2. Ground and Flying Training Requirements.

A10.2.2.1. Refer to **Table A10.1.** (pilot) and **Table A10.2.** (loadmaster) for initial qualification and requalification training requirements based on prior qualifications. Local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Initial qualifications will be as first pilot or aircraft commander at the discretion of the flying unit commander, based on the crewmember's prior experience. Local requalification training will be tailored to the individual after considering the experience and length of time out of the aircraft. If appropriate, the flying unit commander may recommend proficiency simulators or a formal school requalification training course. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

A10.2.2.2. Simulator Training. If a simulator is not available, the aircraft cockpit can be used if the displays are powered and functioning. Simulator training will be accomplished prior to completion of phase 1 training.

Table A10.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67I1 &68I1	1) Formal School 2) AFMC Form 67I1 & 68I1
Flying Training	1) Formal School or 2) AFMC Form 68I2	1) Formal School 2) AFMC Form 68I2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A10.2. Loadmaster Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 68I2	1) Formal School 2) AFMC Form 68I2
Flying Training	1) Formal School or 2) AFMC Form 68I3	1) Formal School 2) AFMC Form 68I3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A10.3. MISSION QUALIFICATION TRAINING.

A10.3.1. General. Refer to **Table A10.3.**, for minimum ground and flying training required to qualify aircrew in C-17 mission elements. AFMC prescribed C-17 missions include Air Refueling, Airdrop (Personnel and Equipment), and Formation.

A10.3.2. Air Refueling Training.

A10.3.2.1. Air Refueling training will be conducted IAW paragraph **3.3. Table A10.3.** outlines the minimum ground and flying training required to qualify pilots in the air refueling mission. Pilots may complete qualification training from either seat. A contact may be credited for each 5 minutes of toggles engaged time on the boom. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted. Day and night qualification requires separate training. Instructor qualification requires the sortie be flown from the right seat.

A10.3.3. Airdrop. **Table A10.3.** (pilot) and **Table A10.4.** (loadmaster). Outlines the minimum ground and flying training required to qualify pilots and flight engineers in the Airdrop mission. Airdrop areas are subdivided into Personnel (including Dummy, Bundle, Retrieval, and HALO) and Equipment (including CDS and Tow).

A10.3.4. Formation. **Table A10.3.** outlines the minimum ground and flying training required to qualify pilots in the formation flying. Separate sorties are not required to qualify in both types of formation. Visual formation qualification may be limited to day only if night formation requirements are not met.

Table A10.3. Pilot Air Refueling, Air Drop, and Formation Training Requirements.

REQUIREMENT	AIR REFUELING	AIRDROP - PERSONNEL	AIRDROP- EQUIPMENT	FORMATION
Ground Training	AFMC Form 67I3	AFMC Form 67I4	AFMC Form 67I5	AFMC Form 67I6
Flying Training	AFMC Form 68I4	AFMC Form 68I5	AFMC Form 68I6	AFMC Form 68I7 & 68I8
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required By unit CC	As Required by unit CC

Table A10.4. Loadmaster Air Drop Training Requirements.

REQUIREMENT	AIRDROP - LVAD	AIRDROP- CDS	AIRDROP- PERSONNEL
Ground Training	AFMC Form 67I7	AFMC Form 67I8	AFMC Form 67I9
Flying Training	AFMC Form 68I9	AFMC Form 68I10	AFMC Form 68I11
Aircrew Exams	As Required by unit CC	As Required By unit CC	As Required By unit CC

A10.4. CONTINUATION TRAINING.

A10.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-17 aircrew members will also accomplish the requirements in **Table A10.5.** and **Table A10.6.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A10.5. Additional C-17 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Air Refueling Contact	1/180
	Air Drop - Dummy, Retrieval, HALO, Bundle, or Personnel	1/180
	Air Drop – Tow, Equipment, or CDS	1/180
Loadmaster	Air Drop - Dummy, Retrieval, HALO, Bundle, or Personnel	1/180
	CDS	1/180
	LVAD	1/180

Table A10.6. Additional C-17 Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Air Refueling Contact	1	1	1	1	1	1
	Air Drop - Dummy, Retrieval, HALO, Bundle, or Personnel	1	1	1	1	1	1
	Air Drop – Tow, Equipment, or CDS	1	1	1	1	1	1
Loadmaster	Air Drop - Dummy, Retrieval, HALO, Bundle, or Personnel	1	1	1	1	1	1
	CDS	1	1	1	1	1	1
	LVAD	1	1	1	1	1	1

A10.4.2. Air Refueling Requirements. Pilots will update currency IAW paragraph **4.4.6.1.** Pilots exceeding air refueling currency requirements in **Table A10.5.** may regain currency by accomplishing a contact under the direct supervision of an instructor. Loss of currency exceeding two months requires the applicable training in **Table A10.3.**

A10.4.3. Air Drop Requirements. Pilots and loadmasters exceeding low level currency requirements in **Table A10.5.** may regain currency by accomplishing a airdrop event under the direct supervision of an instructor. Loss of currency exceeding six months requires the applicable training in **Table A10.3.** (pilot) and **Table A10.4.** (loadmaster).

A10.5. UPGRADE TRAINING.

A10.5.1. General. Upgrade training will be conducted IAW paragraph **5.3. Table A10.7.** outlines the minimum ground and flying training required for instructor upgrade. Instructor pilot candidates will receive training while occupying the right seat.

Table A10.7. Instructor Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR PILOT	INSTRUCTOR LOADMASTER
Ground Training	AFMC Form 67I1	AFMC Form 67I2
Flying Training	AFMC Form 68I2	AFMC Form 68I3
Aircrew Exams	As required by unit CC	As required by unit CC

A10.6. TRAINING RESTRICTIONS.

A10.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A10.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A10.8. C-17 TRAINING PLANS PRESCRIBED.

A10.8.1. General. C-17 prescribed training plans listed in **Table A10.8.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/ or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A10.8. Prescribe Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification, Requalification, and Instructor Upgrade Training	AFMC Forms 67I1 & 68I1 & I2
Loadmaster Qualification and Requalification Training	AFMC Forms 67I2 & 68I3
Pilot Air Refueling	AFMC Forms 67I3 & 68I4
Pilot Airdrop – Equipment & CDS	AFMC Forms 67I5 & 68I6
Pilot Airdrop – Personnel – S/L & HALO	AFMC Forms 67I4 & 68I5
Pilot Formation	AFMC Forms 67I6 & 68I7 & I8
Loadmaster LVAD	AFMC Forms 67I7 & 68I9
LM CDS	AFMC Forms 67I8 & 68I10
LM Personnel	AFMC Forms 67I9 & 68I11

Attachment 11

C-130 TRAINING GUIDELINES

A11.1. GENERAL.

A11.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-130 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-130 continuation training requirements.

A11.1.2. Key Terms and Definitions.

A11.1.2.1. Aircraft Categories. For the purpose of C-130 qualification training, the following C-130 aircraft categories are defined:

A11.1.2.1.1. C-130A. C-130 aircraft series derived from the C-130A (i.e. NC-130A).

A11.1.2.1.2. C-130J. C-130 aircraft series derived from the C-130J (i.e. EC-130J).

A11.1.2.1.3. C-130 E/H. All other C-130 aircraft series (i.e. C-130B through AC-130U).

A11.1.3. Aircrew Requirements and Qualifications.

A11.1.3.1. Navigator Requirements. The flying unit commander will determine the requirement for the navigator crew complement, to include Electronic Warfare Officer (EWO) and Fire Control Officer (FCO), based on flight manual and unit training requirements. Training tables and lesson plans in this manual address the traditional navigator crew position. EWO and FCO procedures, if applicable, must be developed by the unit and incorporated into the unit's supplement.

A11.1.3.2. Loadmaster Requirements. The flying unit commander will determine the need for loadmaster crew complement based on flight manual and unit training requirements.

A11.1.3.3. Scanner Requirements. Scanners will possess either a 1AXXX AFSC (or designated by the DFO as a scanner) and have completed C-130 scanner training. Training will be documented in the individual's training folder and annotated on the AF Form 1381. Flight Engineers performing scanner duties do not require additional training.

A11.2. AIRCRAFT QUALIFICATION TRAINING.

A11.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots, navigators, flight engineers and loadmasters. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section.

A11.2.2. Ground Training Requirements.

A11.2.2.1. Complete the training requirements outlined in **Table A11.1.** (pilots), **Table A11.2.** (flight engineers), **Table A11.3.** (loadmasters), **Table A11.4.** (navigators). Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Emphasis should be placed on a thorough review of aircraft systems/equipment, cockpit orientation, and normal/emergency procedures. All systems and components not covered in training due to differences between the simulator and the C-130 being trained in, will be covered in detail by an instructor during the aircraft visit.

A11.2.2.2. Simulator Training. Pilots and flight engineers will accomplish simulator training prior to the initial qualification flight evaluation.

A11.2.3. Flying Training Requirements.

A11.2.3.1. Initial qualification flying training will be accomplished within the same C-130 category (i.e., C-130A, C-130J, or C-130E/H series). Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

Table A11.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67K1 & simulator	1) Formal School 2) AFMC Form 67K1 & simulator
Flying Training	1) Formal School or 2) AFMC Form 68K1	1) Formal School 2) AFMC Form 68K1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A11.2. Flight Engineer Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67K1 & simulators	1) Formal School 2) AFMC Form 67K1 &simulators
Flying Training	1) Formal School or 2) AFMC Form 68K4	1) Formal School 2) AFMC Form 68K4
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A11.3. Loadmaster Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67K3	1) Formal School 2) AFMC Form 67K3
Flying Training	1) Formal School or 2) AFMC Form 68K3	1) Formal School 2) AFMC Form 68K3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A11.4. Navigator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67K2	1) Formal School 2) AFMC Form 67K2
Flying Training	1) Formal School or 2) AFMC Form 68K2	1) Formal School 2) AFMC Form 68K2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A11.2.4. Conversion/Difference Training.

A11.2.4.1. C-130 conversion training is required for pilots/flight engineers to qualify in another C-130 aircraft category to include: C-130A, C-130J, and the C-130E/H. Pilots/flight engineers seeking qualification in all three categories must have an experience level of 2,000 hours total flying time with a combined total of 1,000 hours in the C-130. C-130 conversion training requirements are outlined in **Table A11.6.** (pilot/flight engineer) and **Table A11.7.** (loadmaster). Difference ground training (using a representative aircraft) is required for aircrew to qualify in different series of the same category aircraft. Difference flying training requirements are outlined in **Table A11.5.**

A11.2.4.2. Navigator conversion/difference training procedures will be established and incorporated into a unit supplement to this instruction. Exception: Navigators must attend formal training to qualify in Combat Talon I or II.

A11.2.4.3. Pilot and flight engineers will attend a formal simulator refresher course when converting between C-130A or C-130J and the C-130E/H category. The flying unit commander may approve a local conversion if at least 8 simulator hours or comparable cockpit training and the requirements in **Table A11.5.** are accomplished.

A11.2.4.4. Loadmasters will complete difference training when converting between any series C-130 (except for the NC-130A and C-130J). Refer to **Table A11.5.** for difference training requirements.

Table A11.5. Training Requirements.

MDS	Pilot	Flight Engineer	Navigator
C-130B	Flight N/R if KC-130F or LC-130F qual	Flight N/R	Flight N/R
C-130E	N/A if initial qual gained at LRF	Same as pilot	Flight N/R
C-130H (1)	Flight N/R if qual on –15 variant	Same as pilot	Flight N/R
C-130H1 (1)	Flight N/R if H2 qual	Same as pilot	Flight N/R
C-130H2 (1)	Include H1 difference	Flight N/R if H3 qual	Flight N/R
C-130H3 (1)	One flight (minimum) required	Same as pilot	Flight N/R
AC-130H	One flight (minimum) required	Same as pilot	Flight N/R
AC-130U (4)	AFSOC training if available	Same as pilot	Same as pilot
EC-130E (Commando Solo)	One flight (minimum) required	Flight N/R	Flight N/R
EC-130H (Compass Call)	One flight (minimum) required	Flight N/R	Flight N/R
EC-130E [C-130E(III) ABCCC]	Flight N/R if qualified on –15 variant	Flight N/R	Flight N/R
HC-130H/P/N	Flight N/R if tanker qual (2)	Flight N/R if MC-P qualified	Flight N/R
HC-130(H)N	Flight N/R if Tanker (2) and H3 qualified	Same as pilot	Flight N/R
HC-130H (USCG)	Flight N/R if H2 qualified	Same as pilot	Flight N/R
KC-130F	Flight N/R if B and Tanker (2) qual	Same as pilot	Flight N/R
KC-130R/T	Flight N/R if H2 and Tanker (2) qualified	Same as pilot	Flight N/R
KC-130T-30	T/O and landing required	Flight N/R if KC-R/T qualified	Flight N/R
LC-130H (L1)	Flight N/R if Ski (3) and H2 qual	Same as pilot	Flight N/R
LC-130H (L2)	Flight N/R if Ski (3) and H3 qual	Same as pilot	Flight N/R
LC-130F (USN)	Flight N/R if Ski (3)and B qual	Same as pilot	Flight N/R
LC-130R1/R2	Flight N/R if Ski (3) and H2 qual	Same as pilot	Flight N/R
MC-130E (4)	Additional FCF training required	Same as pilot	Formal School
MC-130H (4)	Additional FCF training required	Same as pilot	Formal School
MC-130P	One flight (minimum) required	Flight N/R if HC-P/N qualified	Flight N/R
NC-130H	One flight (minimum) required	Flight N/R	Flight N/R
WC-130H	Flight N/R if HC-P/N, MC-P or NC-H qualified	Flight N/R	Flight N/R

NOTES:

1. C-130H (73-1580 thru 73-1599)
    C-130H1 (74-1658 thru 74-2134)
    C-130H2 (78-0806 thru 91-9144 and 92-3021 thru 92-3024)
    C-130H3 (92-0547 thru 92-1538 and 92-3281 and up)

2. Tanker qual refers to any of the following variants: HC-130H/P/N; MC-130E/P; HC-130(H)N; KC-130F/R/T/T-30.

3. SKI equipped LC-130 aircraft require a flight only once. Complete difference training between USN and USAF ski systems.

4. Gain qualification after attending AFSOC formal schools (academic and simulator training minimum). With approval from AFMC/DOV qualification may be completed in-unit if conducted by prior AFSOC crewmembers qualified in the aircraft.

Table A11.6. Pilot/Flight Engineer Conversion Training Requirements.

REQUIREMENT	CONVERSION TO C-130B/E/H/P/N/K/R/T/U (1)	CONVERSION FROM ANY C-130 TO C-130 J (2)
Ground Training	1) Formal School 2) AFMC Form 67K1	1) Formal School or 2) AFMC Form 67K4 & 68K6
Flying Training	1) Formal School or 2) AFMC Form 68K1	1) Formal School or 2) AFMC Form 68K5
Aircrew Proficiency Exams	As required by unit CC	As required by unit CC

NOTES:

1. This training is for conversion to any of the above groups from a C-130A or C-130J.

2. This training only allowed if the individual has previously attended a C-130 initial qualification formal course.

Table A11.7. Loadmaster Conversion Training Requirements.

REQUIREMENT	CONVERSION TO C-130B/E/H/P/N/K/R/T/U	CONVERSION FROM ANY C-130 TO C-130 J
Ground Training	1) Formal School or 2) AFMC Form 67K3	1) Formal School or 2) AFMC Form 67K5
Flying Training	1) Formal School or 2) AFMC Form 68K3	1) Formal School or 2) AFMC Form 68K7
Aircrew Proficiency Exams	As required by unit CC	As required by unit CC

A11.3. MISSION QUALIFICATION TRAINING.

A11.3.1. General. Refer to **Table A11.8.** for minimum ground and flying training needed to qualify aircrew members in C-130 mission elements. AFMC prescribed C-130 mission qualification training includes Functional Check Flight (FCF) training.

A11.3.2. Functional Check Flight (FCF) Training.

A11.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A11.8.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete qualification training from either seat. A C-130 instructor qualified in the FCF mission will administer ground and flying training.

Table A11.8. FCF Training.

REQUIREMENT	PILOT	FLIGHT ENGINEER	NAVIGATOR
Ground Training	AFMC Form 67K7 & 68K9	AFMC Form 67K7 & 68K9	AFMC Form 67K8
Flying Training	AFMC Form 68K10	AFMC Form 68K10	AFMC Form 68K11
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC

A11.4. CONTINUATION TRAINING.

A11.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-130 aircrew members will also accomplish the requirements in **Table A11.9.** and **Table A11.10.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A11.9. Additional C-130 Currency Requirements.

AIRCRAFT	CREW POSITION	TRAINING ITEM	NUMBER/FREQUENCY
C-130	Pilot	Conversion Sortie	1/180
		FCF Sortie	1/180
	Flight Engineer	Conversion Sortie	1/180
		FCF Sortie	1/180
	Navigator	Conversion Sortie	1/180
		FCF Sortie	1/180

Table A11.10. Additional C-130 Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot, Copilot	Conversion Sortie	2	2	2	1	1	1
	Simulated Engine(s) Out Approach	1	1	1	1	1	1
	Simulated Engine(s) Out Missed Approach	1	1	1	1	1	1
	Simulated Engine(s) Out Land	1	1	1	1	1	1
	Holding	1	1	1	1	1	1
	No Flap Landing	1	1	1	1	1	1
Flight Engineer	Conversion Sortie	2	2	2	1	1	1
Navigator	Celestial Observation & Resolution (1) (2)	1	1	1	1	1	1

NOTES:

1. Required only if qualification held in aircraft equipped with a sextant.

2. Not required if restricted to "CONUS only navigation" IAW paragraph **2.4.5.**

A11.4.2. Conversion Currency/Proficiency Requirements.

A11.4.2.1. Pilots and flight engineers conversion training currency is maintained by accomplishing a sortie IAW **Table A11.9.** in each C-130 category aircraft (C-130A, C-130J and all other C-130 variants) in which qualification is held. Proficiency is maintained IAW **Table A11.10.**

A11.4.3. Conversion Recurrency Requirements.

A11.4.3.1. Aircrew members who exceed conversion currency requirements in **Table A11.9.** may regain currency by flying with an instructor on the applicable aircraft. Loss of currency exceeding 6 months requires conversion training IAW with requirements in **Table A11.6.** and **Table A11.7.**

A11.4.3.2. Aircrew members who do not meet proficiency requirements in **Table A11.10.** must accomplish one training flight in the applicable category under the supervision of an instructor.

A11.4.4. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie every 180 days IAW **Table A11.9.** Aircrew members who exceed FCF currency requirements in **Table A11.9.** may regain currency by accomplishing an FCF profile with current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF training IAW with requirements in **Table A11.8.**

A11.5. UPGRADE TRAINING. Upgrade training will be conducted IAW paragraph **5.3. Table A11.11.**, and **Table A11.12.** outlines the minimum ground and flying training required for aircraft commander, instructor pilot, instructor flight engineer, instructor loadmaster and instructor navigator upgrade.

Table A11.11. Pilot/Navigator Upgrade Training Requirements.

REQUIREMENT	TO AIRCRAFT COMMANDER	TO INSTRUCTOR PILOT	TO INSTRUCTOR NAVIGATOR
Ground Training	1) Formal School 2) AFMC Form 67K1	1) Formal School 2) AFMC Form 67K1	1) Formal School 2) AFMC Form 67K2
Flying Training	1) Formal School 2) AFMC Form 68K1	1) Formal School 2) AFMC Form 68K1	1) Formal School 2) AFMC Form 68K4
Aircrew Exams	Open & Closed Book Exams	As required by unit CC	As Required by unit CC

Table A11.12. Flight Engineer/Loadmaster Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR FE UPGRADE	INSTRUCTOR LM UPGRADE
Ground training	1) Formal School 2) AFMC Form 67K1	1) Formal School 2) AFMC Form 67K1
Flying training	1) Formal School 2) AFMC Form 68K4	1) Formal School 2) AFMC Form 68K3
Aircrew Exams	Open and closed book	Open and closed book

A11.6. TRAINING RESTRICTIONS.

A11.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A11.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A11.8. C-130 TRAINING PLANS PRESCRIBED.

A11.8.1. General. C-130 prescribed training plans listed in **Table A11.13.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/ or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A11.13. Prescribe Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67K1 & 68K1
Flight Engineer Qualification & Requalification Training	AFMC Forms 67K1 & 68K4
Loadmaster Qualification & Requalification Training	AFMC Forms 67K3 & 68K3
Navigator Qualification & Requalification Training	AFMC Forms 67K2 & 68K2
Pilot C-130J Conversion Training	AFMC Forms 67K4 & 68K5
Pilot C-130 Conversion Training	AFMC Forms 67K1 & 68K1
Flight Engineer Conversion Training	AFMC Forms 67K1 & 68K4
Loadmaster C-130J Conversion Training	AFMC Forms 67K5 & 68K7
Loadmaster C-130 Conversion Training	AFMC Forms 67K3 & 68K3
Pilot FCF Training	AFMC Forms 67K7, 68K9 & 68K10
Flight Engineer FCF Training	AFMC Forms 67K7, 68K9 & 68K10
Navigator FCF Training	AFMC Forms 67K8 & 68K11
Aircraft Commander Upgrade Training	AFMC Forms 67K1 & 68K1
Pilot Instructor Upgrade Training	AFMC Forms 67A2, 67K1& 68K1
Navigator Instructor Upgrade Training	AFMC Forms 67A2, 67K1 & 68K2
Flight Engineer Instructor Upgrade Training	AFMC Forms 67A2, 67K1 & 68K4
Loadmaster Instructor Upgrade Training	AFMC Forms 67A2, 67K3 & 68K3

Attachment 12

C-135 TRAINING GUIDELINES

A12.1. GENERAL.

A12.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-135 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-135 continuation training requirements.

A12.1.2. Key Terms and Definitions.

A12.1.2.1. Aircraft Categories. For the purpose of C-135 qualification training, the following C-135 aircraft categories are defined:

A12.1.2.1.1. Turbojet (TJ). C-135 aircraft series powered by turbojet engines (J57-P-59W or derivative).

A12.1.2.1.2. Turbofan (TF). C-135 aircraft series powered by turbofan engines (TF33-PW-102 or derivative).

A12.1.2.1.3. Hi-Bypass (HB). C-135 aircraft series powered by high bypass turbofan engines (F108-CF-100 or derivative).

A12.1.2.2. Pacer CRAG (PC). Any model of C-135 with the Pacer CRAG avionics upgrade.

A12.1.2.3. GATM. Any model of C-135 with the GATM avionics upgrade. Until fleet upgrade modifications are initiated, GATM training requirements will be unit developed.

A12.1.2.4. Rivet GLASS (RG). Any model of C-135 with the Rivet GLASS avionics upgrade.

A12.1.3. Aircrew Requirements and Qualifications.

A12.1.3.1. Navigator Requirements. The Flying Unit Commander will determine the requirement for the unit navigator crew complement, to include Electronic Warfare Officer (EWO), based on flight manual and unit training requirements. Training tables and lessons outlined in this instruction address training required for the traditional navigator crew position.

A12.1.3.2. Pilot Qualification. Pilots maintaining qualification in all three aircraft categories (TJ, TF, and HB) will not be considered for qualification into another MDS-aircraft (dual qualification).

A12.1.3.3. Navigator Qualification. The C-135 and B-707 (C-18, E-3, E-8, etc) are considered a single qualification upon completion of a flight evaluation in each aircraft or upon completion of applicable conversion training.

A12.2. AIRCRAFT QUALIFICATION TRAINING.

A12.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots, navigators, flight engineers, and boom operators. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements as outlined in this section (**Table A12.1.** thru **Table A12.4.**).

A12.2.2. Ground Training Requirements. Complete the training requirements outlined in **Table A12.1.** (pilots), **Table A12.2.** (flight engineers), **Table A12.3.** (navigator) and **Table A12.4.** (boom

operator). Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Emphasis should be placed on a thorough review of aircraft systems/ equipment, cockpit orientation, and normal/emergency procedures. All systems and components not covered in training due to differences between the simulator and the C-135 being trained in, will be covered in detail by an instructor during the aircraft visit.

A12.2.2.1. A C-135 Transition Course will be used to augment applicable AFMC prescribed ground training. If training would be excessively delayed because of class scheduling for the C-135 Transition Course (academics or simulator), the student may proceed with the ground and flying training in this volume. Complete the C-135 Transition Course prior to the initial qualification flight evaluation. In-flight refueling specialists (boom operators) initial qualification training will be completed at a formal school.

A12.2.3. Flying Training Requirements.

A12.2.3.1. For student continuity, qualification flying training will be accomplished within the same C-135 aircraft category to the maximum extent practical. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student.

Table A12.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC 67L1 & simulators	1) Formal School 2) Transition course/simulator and AFMC Form 67L1
Flying Training	1) Formal School or 2) AFMC Form 68L1	1) Formal School 2) AFMC Form 68L1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A12.2. Flight Engineer Qualification/Requalification Training Requirements (1).

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	AFMC 67L1 & simulator	Transition Course, simulator, and AFMC Form 67L1
Flying Training	AFMC 68L2	AFMC 68L2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

NOTE:

1. Only flight engineers that are graduates of an ETCA formal school for flight engineers are authorized to complete the training outlined in this table.

Table A12.3. Navigator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67L2	1) Formal School 1) AFMC Form 67L2
Flying Training	1) Formal School or 2) AFMC Form 68L3	1) Formal School 2) AFMC Form 68L3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A12.4. Boom Operator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School or 2) AFMC Form 67L3	Formal School
Flying Training	1) Formal School or 2) AFMC Form 68L4	Formal School
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A12.2.4. Conversion Training.

A12.2.4.1. C-135 conversion training is required for pilots/flight engineers to qualify in another C-135 aircraft category to include: turbojet (TJ), turbofan (TF), or hi-bypass (HB). Pilots/flight engineers seeking qualification in all three categories must have an experience level of 2,000 hours total flying time with a combined total of 1,000 hours in the C-135 or a B-707 MDS. C-135 conversion training requirements are outlined in **Table A12.5.** (pilots) and **Table A12.6.** (flight engineers).

A12.2.4.2. C-135 conversion training is not required for navigators to qualify in another C-135 aircraft category to include: turbojet (TJ), turbofan (TF), or hi-bypass (HB). However, B-707 navigators may qualify in the C-135 by completing a flight evaluation in each aircraft or upon completion of the conversion training outlined in **Table A12.7.** Navigators maintaining qualification in both the C-135 and B-707 must take the qualification open and closed book examinations for both aircraft as a requisite to a flight evaluation in either aircraft and comply with MDS-specific egress training requirements.

A12.2.4.3. Conversion training is not required for boom operators to qualify in another C-135 aircraft engine category to include turbojet (TJ), turbofan (TF), or hi-bypass (HB). However, boom operators will be trained in APU (and other applicable systems) operation using unit developed training.

A12.2.5. Difference Training. Difference training is required when differences within categories of the C-135 warrant specialized training. Difference training requirements are outlined in **Table A12.5.**

(pilot), **Table A12.6.** (flight engineer), **Table A12.7.** (navigator), and **Table A12.8.** (boom operator). In addition, the flying unit commander must ensure aircrew members are qualified and properly trained in the applicable normal procedures, emergency procedures, and crew duties for the aircraft and specific flight manual utilized for the mission flown.

Table A12.5. Pilot Conversion and Difference Training Requirements.

REQUIREMENT	CONVERSION (FROM - TO) TJ/TF/HB	DIFFERENCE (WITHIN) TJ/TF/HB
Ground Training	1) Formal School or 2) AFMC Form 67L1	1) AFMC Form 67L8 or 2) Unit developed
Flying Training	1) Formal School or 2) AFMC Form 68L10	1) AFMC Form 68L9 or 2) Unit developed
Aircrew Exams	Open and Closed-book	As Required by unit CC

Table A12.6. Flight Engineer Conversion and Difference Training Requirements.

REQUIREMENT	CONVERSION (FROM - TO) TJ/TF/HB	DIFFERENCE (WITHIN) TJ/TF/HB
Ground Training	1) Formal School or 2) AFMC Form 67L1	1) Unit developed
Flying Training	1) Formal School or 1) AFMC Form 68L12	1) Unit developed
Aircrew Exams	Open and Closed-book	As Required by unit CC

Table A12.7. Navigator Conversion/Difference Training Requirements.

REQUIREMENT	CONVERSION (FROM) B-707	DIFFERENCE (WITHIN) TJ/TF/HB
Ground Training	1) Formal School or 2) AFMC Form 67L2	1) AFMC Form 67L8 or 1) Unit developed
Flying Training	Formal School or AFMC Form 68L11	1) AFMC Form 68L9 or 1) Unit developed
Aircrew Exams	Open & Closed Book Exams	As Required by unit CC

Table A12.8. Boom Operator Conversion/Difference Training Requirements.

REQUIREMENT	CONVERSION (TO-FROM) TJ/TF/HB	DIFFERENCE (WITHIN) TJ/TF/HB
Ground Training	Unit developed	Unit developed
Flying Training	Unit developed	Unit developed
Aircrew Exams	Open & Closed Book Exams	As Required by unit CC

A12.3. MISSION QUALIFICATION TRAINING.

A12.3.1. General. Table A12.9., Table A12.10., and Table A12.11. outline the minimum ground and flying training needed to qualify aircrew members in C-135 mission elements. AFMC prescribed C-135 mission qualification training is Receiver Air Refueling, Tanker Air Refueling, and FCF. Additional unit specific mission training will be established by the flying unit commander and included in the unit supplement to this instruction.

A12.3.2. Air Refueling Training.

A12.3.2.1. Tanker Refueling. Table A12.9. outlines the minimum ground and flying training needed to qualify aircrew members in the tanker refueling mission. Pilots may complete qualification training from either seat. A C-135 instructor qualified in tanker refueling will administer ground and flying training.

A12.3.2.2. Receiver Refueling. Table A12.10. outlines the minimum ground and flying training required to qualify aircrew members in the receiver refueling mission. Pilots may complete qualification training from either seat. A contact may be credited for each 5 minutes of toggles engaged time on the boom. Proficiency in day refueling and contacts will be demonstrated before night contacts are attempted.

A12.3.2.2.1. To be a receiver AR qualified instructor, a pilot, flight engineer, or navigator must be instructor qualified in the basic aircraft. Only pilots require instructor upgrade training. Basic aircraft instructor pilot upgrade and receiver AR instructor pilot upgrade training may be conducted concurrently. In this instance, the pilot must be receiver air refueling qualified prior to beginning instructor upgrade training. Receiver qualified pilots in the B-707 becoming qualified only need accomplish one training flight with a qualified AR instructor.

Table A12.9. Tanker Air Refueling Training Requirements.

REQUIREMENT	TANKER PILOT	TANKER NAVIGATOR
Ground Training	AFMC Form 67L4	AFMC Form 67L6
Flying Training	AFMC Form 68L5	AFMC Form 68L8
Aircrew Exams	As required by unit CC	As required by unit CC

Table A12.10. Receiver Air Refueling Training Requirements.

REQUIREMENT	RECEIVER PILOT	RECEIVER FLIGHT ENGINEER	RECEIVER NAVIGATOR	INSTR PILOT UPGRADE
Ground Training	AFMC Form 67L5	AFMC Form 67L5	AFMC Form 67L6	AFMC Form 67L5
Flying Training	AFMC Form 68L6	AFMC Form 68L7	AFMC Form 68L8	AFMC Form 68L6
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A12.3.3. Functional Check Flight (FCF) Training.

A12.3.3.1. FCF training will be conducted IAW paragraph **3.4. Table A12.11.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete qualification training from either seat. A C-135 instructor qualified in the FCF mission will administer ground and flying training.

Table A12.11. FCF Training.

REQUIREMENT	PILOT	BOOM OPERATOR	FLIGHT ENGINEER	NAVIGATOR
Ground Training	AFMC Form 67L9	AFMC Form 67L9	AFMC Form 67L9	AFMC Form 67L9
Flying Training	AFMC Form 68L13	AFMC Form 68L15	AFMC Form 68L13	AFMC Form 68L14
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC	As required by unit CC

A12.4. CONTINUATION TRAINING.

A12.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-135 aircrew members will also accomplish the requirements in **Table A12.12.** and **Table A12.13.** The flying unit commander may specify additional mission specific events. For navigators, qualification in the C-135, and B-707 aircraft is considered a single qualification for the purposes of currency and proficiency requirements upon completion of the applicable conversion training, or qualification flight evaluation.

Table A12.12. Additional C-135 Currency Requirements.

AIRCRAFT	CREW POSITION	TRAINING ITEM	NUMBER/FREQUENCY
C-135	Pilot	Conversion Sortie	1/180
		Receiver AR/Contact	1/120
		Tanker AR	1/180
		FCF Sortie	1/180
	Flight Engineer	FCF Sortie	1/180
	Navigator	AR Rendezvous	1/180
		Conversion Sortie	1/180
		FCF Sortie	1/180
	Boom Operator	FCF Sortie	1/180
		Contacts	1/60

Table A12.13. Additional C-135 Proficiency Flying Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Sim Eng Fail on Takeoff	2	2	2	1	1	1
	Sim Eng Out Missed Approach	2	2	2	1	1	1
	Sim Eng Out Landing	2	2	2	1	1	1
	Night Receiver AR Contact	1	1	1	1	1	1
	Tanker Air Refueling Breakaway	1	1	1	1	1	1
	Receiver Air Refueling Breakaway	1	1	1	1	1	1
	Proficiency Sortie	1	1	1	1	1	1
Boom Operator	Manual Contacts	2	2	2	1	1	1
	Contacts	5	4	3	2	1	1
Navigator	Air Refueling Rendezvous	1	1	1	1	1	1

A12.4.2. Pilot Proficiency Sortie. Pilots may log a proficiency training sortie, as established in **Table A12.13.**, if they actively control the aircraft for a minimum of one half hour of primary time and accomplish at least five different events from the following list:

A12.4.2.1. Takeoff or departure.

A12.4.2.2. Penetration.

A12.4.2.3. Precision approach.

A12.4.2.4. Non-precision approach.

A12.4.2.5. Simulated emergency procedure.

A12.4.2.6. VFR pattern.

A12.4.2.7. Landing or touch-and-go.

A12.4.2.8. Holding.

A12.4.2.9. Airwork.

A12.4.2.10. Receiver AR.

A12.4.2.11. Circling approach.

A12.4.2.12. Autopilot - off tanker air refueling.

A12.4.3. Conversion Currency Requirements. Pilot and Flight Engineer conversion training currency is maintained by accomplishing a sortie every 180 days in each C-135 category aircraft (TJ, TF, HB) in which qualification is held. Navigator conversion training currency is maintained by accomplishing a sortie every 180 days in each aircraft (C-135, B-707) in which qualification is held. Boom operators do not have a conversion training currency requirement.

A12.4.3.1. If C-135 pilots cannot maintain AFMC mandated currency requirements (**Table 7.**) within aircraft category, the squadron commander or operations officer, on a case-by-case basis, may authorize currency to be maintained in any C-135 aircraft category. The following requirements must be met:

A12.4.3.1.1. The aircraft to be used must have similar avionics equipment.

A12.4.3.1.2. Accomplish pilot phase 1 ground training applicable to the aircraft to be flown.

A12.4.3.1.3. Be supervised by a qualified IP at a set of flight controls.

A12.4.3.1.4. Use FP duty code on the AFTO Form 781.

A12.4.3.1.5. These events can be counted toward semiannual training requirements.

A12.4.3.2. The flying unit commander or operations officer, on a case-by-case basis, may authorize a B-707 airframe be used. If the pilot is not qualified in the B-707 airframe, the following requirements must be met:

A12.4.3.2.1. Pilot must have 2000 hours total flying time with at least 1000 hours in the C-135.

A12.4.3.2.2. Accomplish pilot Phase I Ground Training applicable to the aircraft to be flown.

A12.4.3.2.3. Be supervised by a qualified IP at a set of flight controls.

A12.4.3.2.4. Use an XP duty code on the AFTO Form 781.

A12.4.3.2.5. Not log events toward semiannual training requirements.

A12.4.4. Conversion Recurrency Requirements. Aircrew members who exceed conversion currency requirements in **Table A12.12.** may regain currency by flying with an instructor on the applicable aircraft. Loss of currency exceeding 6 months requires conversion training IAW with requirements in **Table A12.5.**, **Table A12.6.**, **Table A12.7.** and **Table A12.8.** as applicable.

A12.4.5. Tanker Air Refueling Recurrency.

A12.4.5.1. Pilots exceeding tanker air refueling currency requirements in **Table A12.12.** may regain currency by accomplishing at least one in-flight air refueling under the direct supervision of

a current tanker air refueling qualified instructor pilot. Loss of currency exceeding 6 months requires Tanker Air Refueling training IAW **Table A12.9.** as applicable.

A12.4.5.2. Navigator air refueling currency is maintained by accomplishing a tanker or receiver rendezvous. Navigators exceeding air refueling currency requirements in **Table A12.12.** may regain currency by accomplishing at least one air refueling rendezvous under the supervision of a current air refueling qualified instructor navigator. A tanker or receiver AR rendezvous satisfies the recurrency requirement. Loss of currency exceeding 6 months requires Tanker Air Refueling training IAW **Table A12.9.** and **Table A12.10.** as applicable.

A12.4.6. Receiver Air Refueling Currency Requirements.

A12.4.6.1. Pilots may accomplish receiver air refueling currency requirements in any C-135/B-707 aircraft in which qualified. However, if the pilot is not qualified in the C-135, the following restrictions apply:

A12.4.6.1.1. Complete pilot qualification ground training IAW **Table A12.1.**

A12.4.6.1.2. Under direct supervision of a receiver qualified instructor pilot.

A12.4.6.1.3. Access to flight controls <u>only</u> during receiver refueling training.

A12.4.6.2. Pilots dual qualified in the C-135/B-707 aircraft and also receiver air refueling qualified in both aircraft may accomplish currency and proficiency receiver air refueling training events in either aircraft.

A12.4.6.3. Navigator air refueling currency is maintained by accomplishing a tanker or receiver rendezvous. Either rendezvous satisfies the requirements in A12.12 and A12.13.

A12.4.7. Receiver Air Refueling Recurrency Requirements.

A12.4.7.1. Pilots exceeding receiver air refueling currency requirements in **Table A12.12.** may regain currency by accomplishing a day or night contact under the direct supervision of a receiver qualified instructor pilot. Loss of currency exceeding 6 months requires Receiver Air Refueling training IAW **Table A12.10.** as applicable.

A12.4.7.2. Navigator air refueling currency is maintained by accomplishing a tanker or receiver rendezvous. Navigators exceeding air refueling currency requirements in **Table A12.12.** may regain currency by accomplishing at least one in-flight air refueling rendezvous under the supervision of a current air refueling qualified instructor navigator. Either a tanker or receiver AR rendezvous need to be accomplished. Loss of currency exceeding 6 months requires Receiver Air Refueling training IAW **Table A12.9.** and **Table A12.10.** as applicable.

A12.4.8. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie every 180 days. Aircrew members who exceed FCF currency requirements in **Table A12.12.** may regain currency by accomplishing an FCF profile with current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF training IAW with requirements in **Table A12.11.** as applicable.

A12.5. UPGRADE TRAINING. Upgrade training will be conducted IAW paragraph **5.3. Table A12.14.** outlines the minimum ground and flying training required for aircraft commander, instructor pilot, instructor flight engineer, instructor navigator and instructor boom operator upgrade.

Table A12.14. Instructor Upgrade Training.

REQUIREMENT	PILOT	FLIGHT ENGINEER	NAVIGATOR	BOOM OPERATOR
Ground Training	1)Formal School 2)AFMC Form 67L1	1)Formal School 2)AFMC Form 67L1	1)Formal School 2)AFMC Form 67L2	1)Formal School 2)AFMC Form 67L3
Flying Training	1)Formal School 2)AFMC Form 68L1	1)Formal School 2)AFMC Form 68L2	1)Formal School 2)AFMC Form 68L3	1)Formal School 2)AFMC Form 68L4
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC	As required by unit CC

A12.6. TRAINING RESTRICTIONS.

A12.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A12.7. ADDITIONAL TRAINING.

A12.7.1. General. Since this manual includes all C-135 airframes with diversified configurations, this chapter will be used as a guide when the information is not covered in the specific aircraft flight manual. All flight manual procedures take precedence over this manual and will be reviewed prior to accomplishing any maneuvers inflight. This guidance is to accomplish training and instructor pilot demonstration maneuvers in C-135 aircraft. When performing maneuvers the *conditions* and *process* sections of this manual should be used as a guide. The *techniques* outlined in this chapter are only *suggested* methods of performing the maneuvers. Unless briefed otherwise, make recoveries from maneuvers to straight and level flight at an indicated airspeed of at least 250 knots. Return the aircraft to a safe configuration after each training scenario. The PIC will brief all crewmembers over interphone before starting the maneuvers.

A12.7.2. Steep Turns.

A12.7.2.1. Purpose:

A12.7.2.1.1. To develop instrument cross-check.

A12.7.2.1.2. To practice control techniques.

A12.7.2.1.3. To increase instrument proficiency.

A12.7.2.2. Recommended Conditions:

A12.7.2.2.1. Above 10,000 feet AGL.

A12.7.2.2.2. Airspeed - 250 KIAS.

A12.7.2.2.3. 45 bank angle.

A12.7.2.2.4. Add approximately 300 lbs. per engine fuel flow.

A12.7.2.3. Process:

A12.7.2.3.1. Clear area.

A12.7.2.3.2. Rate of roll is the same for normal turns.

A12.7.2.3.3. Stabilize in level straight flight at 250 KIAS before beginning maneuver.

A12.7.2.3.4. Use power as necessary to maintain airspeed.

A12.7.2.4. Techniques:

A12.7.2.4.1. Emphasize use of trim and rapid cross-check.

A12.7.2.4.2. Trim at 20°, 30°, 40° of bank.

A12.7.2.4.3. Practice until hands off. Note relationship of bank to drag.

A12.7.3. Landing Attitude Demonstration.

A12.7.3.1. Purpose: To establish and hold the landing attitude picture long enough to observe all visual cues.

A12.7.3.2. Conditions:

A12.7.3.2.1. Normal touch-and-go procedures apply, except ground contact is optional.

A12.7.3.2.2. Maneuver terminates with go-around procedures.

A12.7.3.2.3. Direct IP supervision IAW paragraph **1.7.8.**

A12.7.3.3. Process:

A12.7.3.3.1. Maintain the final approach power setting (or add power if needed) and set landing attitude just above the runway.

A12.7.3.3.2. Hold level pitch attitude constant, noting the relative movement, peripheral and horizon cues at the end of the runway.

A12.7.3.3.3. At no later than 2000 feet remaining, advance the power to go-around power setting and initiate normal climbout to traffic pattern altitude.

A12.7.3.3.4. If runway contact is made, re-establish attitude and power to remain off the runway or initiate a go-around.

A12.7.3.3.5. The maneuver terminates with a go-around.

A12.7.3.4. Techniques:

A12.7.3.4.1. With flaps-20, maintain appropriate pattern speed on downwind and note position of the horizon. Mark the position of the horizon with a grease pencil or a bug spot. This picture approximates the same landing attitude position of the horizon during normal landings.

A12.7.3.4.2. Point out center line T and landing attitude reference marks.

A12.7.3.4.3. Discuss the use of rudder to keep the aircraft pointed straight down the runway.

A12.7.3.4.4. Discuss control of drift across the runway using ailerons for control.

A12.7.3.4.5. The most effective demo is accomplished at speeds between touchdown and reference speed.

A12.7.4. Trim Demonstration.

A12.7.4.1. Purpose:

A12.7.4.1.1. To demonstrate the three methods to trim the elevator.

A12.7.4.1.2. To show control column displacement in out of trim conditions.

A12.7.4.1.3. To demonstrate manual trim techniques.

A12.7.4.1.4. To show autopilot trim is independent of the normal stabilizer trim system.

A12.7.4.2. Conditions:

A12.7.4.2.1. Clear of clouds.

A12.7.4.2.2. IP supervision required IAW paragraph **1.7.8.**

A12.7.4.3. Process:

A12.7.4.3.1. Out of trim / manual trim demonstration:

A12.7.4.3.2. Trim for straight and level flight. Note the column in the center position and relationship to the sliding window handle.

A12.7.4.3.3. Trim 1 unit nose down, while maintaining level flight. Note control column displacement toward aft, reducing the elevator authority available.

A12.7.4.3.4. Trim an additional 2 to 3 units nose down and demonstrate that level flight can still be maintained.

A12.7.4.3.5. Stabilizer trim switch - cut out.

A12.7.4.3.6. Maintain level flight with the elevator and have the student try to trim the aircraft using the manual trim wheel. Show unloading the elevator control pressures reduces the student manual trim forces.

A12.7.4.3.7. Stabilizer trim switch - on.

A12.7.4.4. Autopilot Trim Procedures:

A12.7.4.4.1. Stabilizer trim switch - cut out.

A12.7.4.4.2. Manually trim for approximately 500 feet per minute rate of climb.

A12.7.4.4.3. Engage all axis of the autopilot, including the altitude hold function.

A12.7.4.4.4. Note that the autopilot will trim the aircraft back to level flight using the autopilot pitch trim motor.

A12.7.4.4.5. Disconnect the altitude hold function and trim the aircraft up and down using the pitch controller.

A12.7.4.4.6. Stabilizer Trim Switch - normal.

A12.7.5. Simulated Jammed Stabilizer.

A12.7.5.1. Purpose: To show the use and effectiveness of spoilers for pitch trim in the event of a jammed stabilizer. This maneuver may be accomplished on a full stop landing or a touch-and-go.

A12.7.5.2. Conditions:

A12.7.5.2.1. Leave stabilizer trim cutout switch in normal.

A12.7.5.2.2. May be accomplished day or night, clear of clouds.

A12.7.5.2.3. Direct IP supervision required IAW paragraph **1.7.8.**

A12.7.5.3. Process:

A12.7.5.3.1. Trim the aircraft to pattern speed with flaps-20.

A12.7.5.3.2. Cutout inboard spoilers.

A12.7.5.3.3. Lower flaps to, 30°, 40°, and 50°, relieve yoke pressure using the speed brake lever to trim the aircraft.

A12.7.5.3.4. Increased speedbrakes will require increased power settings to compensate for added drag.

A12.7.5.3.5. Fly a normal approach and do not retard the throttles until established in the landing flare.

A12.7.5.3.6. If the landing is a touch and go, stabilize the aircraft in a three point attitude, return the speed brakes to zero and reset the inboard spoiler switch to normal. Resets flaps and trim for the touch and go.

A12.7.5.3.7. If the landing is a full stop, stabilize the aircraft in a three-point attitude, return the speed brakes to zero and reset the inboard spoiler switch to normal. Complete the full stop using normal speed brakes and braking techniques.

A12.7.5.4. Techniques:

A12.7.5.4.1. Discuss the three ways to trim the stabilizer: manual trim wheel, electric trim motor, autopilot trim motor.

A12.7.5.4.2. Differential spoilers are the most effective method for correcting pitch and provide about 3 units of trim.

A12.7.5.4.3. Avoid trim and power cycle tendency. Point out the tendency to over control the lateral inputs due to the intermediate speed brake position.

A12.7.5.4.4. Hold power until you are you ready to land. The aircraft will land as soon as power is reduced because of the added drag of the spoilers.

A12.7.5.4.5. Discuss go-around considerations, raising the flaps, and accelerating; will all require pitch changes.

A12.7.5.4.6. Discuss reconfiguration if making a full stop landing.

A12.7.6. Lateral Control (Spoiler) Demonstration.

A12.7.6.1. Purpose:

A12.7.6.1.1. To demonstrate the roll rate and aileron forces required for different spoiler settings.

A12.7.6.1.2. To demonstrate the reduced lateral control effectiveness after spoiler or hydraulic malfunctions.

A12.7.6.2. Conditions:

A12.7.6.2.1. Clear of clouds.

A12.7.6.2.2. Instructor supervision is required IAW paragraph **1.7.8.**

A12.7.6.3. Process:

A12.7.6.3.1. Make 30° bank turns noting the roll rates and aileron forces required during roll in and out of turns under the following conditions:

A12.7.6.3.2. All spoilers - on, speed brake - 0°.

A12.7.6.3.3. Inboard spoilers - cut out, outboards - normal

A12.7.6.3.4. Outboard spoilers - cutout, inboards - normal

A12.7.6.3.5. All spoilers - cut out

A12.7.6.3.6. All spoilers - on, speed brakes - 30°.

A12.7.6.3.7. All spoilers - on, speed brakes - 60°.

A12.7.6.4. Techniques:

A12.7.6.4.1. Use the same, relatively rapid roll rates for all configurations.

A12.7.6.4.2. Use same control wheel deflection.

A12.7.6.4.3. Let the student fly the aircraft.

A12.7.6.4.4. Discuss landing considerations with partial or all spoilers inoperative.

A12.7.6.4.5. Note tendency to over control at 30° speed brakes.

A12.7.6.4.6. Watch airspeed with speed brakes extended because of increased drag.

A12.7.7. Approach to Initial Buffet.

A12.7.7.1. Purpose:

A12.7.7.1.1. To familiarize the student with C-135 aircraft flight characteristics.

A12.7.7.1.2. To teach recognition of initial buffet and practice recovery techniques.

A12.7.7.1.3. Show relationship between AOA and stall.

A12.7.7.2. Conditions:

A12.7.7.2.1. Daylight only.

A12.7.7.2.2. Maximum recommended gross weight - 170,000.

A12.7.7.2.3. Altitude: above 20,000 feet above the terrain and 10,000 feet above the top of clouds. Do not practice above FL 300.

A12.7.7.2.4. Wings level, clean configuration.

A12.7.7.2.5. Rudder power - ON. Series yaw damper (SYD) - ON.

A12.7.7.2.6. Boom up and latched, if installed.

A12.7.7.2.7. Fuel - forward and aft body tanks empty, wings tanks equalized.

A12.7.7.2.8. No malfunctions in systems affecting aircraft control.

A12.7.7.2.9. Direct IP supervision required IAW paragraph **1.7.8.**

A12.7.7.3. Process:

A12.7.7.3.1. Compute and post Reference speed (flaps - up), Initial buffet speed, and power setting for NRT and MCT.

A12.7.7.3.2. Inform Crewmembers to fasten seat belts and shoulder harnesses.

A12.7.7.3.3. Throttles-setting which will allow a slow deceleration to reference speed.(approximately 1 knot per second)

A12.7.7.3.4. Continue to trim-off elevator pressures until computed reference speed while maintaining altitude.

A12.7.7.3.5. Discuss pitch and AOA relationship during entry.

A12.7.7.3.6. When you start to feel a definite buffet - recover.

A12.7.7.3.7. Lower the nose slightly and stand-up the power, maintain wings level and set the recovery power setting while holding the nose slightly below the horizon. As the aircraft begins to accelerate and fly, smoothly raise the nose to maintain level flight and minimize altitude loss. Be cautious not to apply too much back pressure in order to avoid secondary stalls.

A12.7.7.4. Techniques:

A12.7.7.4.1. Set 3000' cabin altitude and minimum rate of change. Note the noise level in the cockpit.

A12.7.7.4.2. As the aircraft decelerates - observe AOA, ADI pitch attitude, and outside visual references.

A12.7.7.4.3. Discuss the AOA gage as reflecting the percent of lift being demanded from the wing.

A12.7.7.4.4. Discuss the tremor and vibration caused by the disturbed airflow over the horizontal stabilizer as it occurs.

A12.7.7.4.5. Discuss the definite buffet and airframe vibration caused by wing root stalling starting at the trailing edge near the wing root as it occurs. Recover the aircraft at the first signs of buffet. In the simulator, you can let it progress further to show severe buffeting often described as an elephant stomping on the wings.

A12.7.7.5. Slow Flight.

A12.7.7.5.1. Purpose: To show the slow speed handling characteristics of the C-135 aircraft.

A12.7.7.5.2. Conditions:

A12.7.7.5.2.1. Clear of clouds.

A12.7.7.5.2.2. Altitude: a minimum of 10,000 feet AGL.

A12.7.7.5.2.3. Direct IP supervision required IAW paragraph **1.7.8.**

A12.7.7.5.3. Process:

A12.7.7.5.3.1. Compute and post: NRT or MCT power settings, 40° flap threshold speed, initial buffet speed, and flap retraction speed.

A12.7.7.5.3.2. Configure the aircraft with flaps – 40°.

A12.7.7.5.3.3. Maintain speed between 40° flap threshold and initial buffet speed.

A12.7.7.5.3.4. Maintain altitude and speed while executing turns using 10° and 20° of bank demonstrating the slow speed handling characteristics of the aircraft.

A12.7.7.5.3.5. Do not exceed posted power settings.

A12.7.8. Unusual Attitude Recoveries.

A12.7.8.1. Purpose: To demonstrate proper recovery techniques from unusual attitudes.

A12.7.8.2. Conditions:

A12.7.8.2.1. Prohibited at night or during IMC.

A12.7.8.2.2. IP supervision required IAW paragraph **1.7.8.**

A12.7.8.2.3. Process: IAW the applicable flight manual and AFMAN 11-217.

A12.7.9. 30° Flap Approach and Landing.

A12.7.9.1. Purpose: To demonstrate techniques for flying a 30° flaps approach and landing.

A12.7.9.2. Conditions: IP supervision required IAW paragraph**1.7.8.**

A12.7.9.3. Process:

A12.7.9.3.1. Configure the aircraft with flaps – 30° and gear - down.

A12.7.9.3.2. Note the lower power settings required due to less drag.

A12.7.9.3.3. Note the higher turn radius due to the higher speed.

A12.7.9.3.4. Note the early power reduction required due to the low total drag configuration.

A12.8. C-135 TRAINING PLANS PRESCRIBED.

A12.8.1. General. C-135 prescribed training plans listed in **Table A12.15.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/ or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A12.15. - PRESCRIBED TRAINING PLANS.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67L1 & 68L1
Flight Engineer Qualification & Requalification Training	AFMC Forms 67L1 & 68L2
Navigator Qualification & Requalification Training	AFMC Forms 67L2 & 68L3
Boom Operator Qualification & Requalification Training	AFMC Forms 67L3 & 68L4
Pilot Conversion Training	AFMC Forms 67L1 & 68L10
Pilot Difference Training	AFMC Forms 67L8 & 68L9
Flight Engineer Conversion Training	AFMC Forms 67L1 & 68L12
Navigator Conversion Training	AFMC Forms 67L2 & 68L11
Navigator Difference Training	AFMC Forms 67L8 & 68L9
Pilot A/R Receiver Qualification and Instructor Upgrade Training	AFMC Forms 67L5 & 68L6
FE A/R Receiver Qualification	AFMC Forms 67L5 & 68L7
Navigator A/R Receiver Qualification	AFMC Forms 67L6 & 68L8
Pilot A/R Tanker Qualification	AFMC Forms 67L4 & 68L5
Navigator A/R Tanker Qualification	AFMC Forms 67L6 & 68L8
Pilot/FE FCF Qualification	AFMC Forms 67L9 & 68L13
Navigator FCF Qualification	AFMC Forms 67L9 & 68L14
Boom Operator FCF Qualification	AFMC Forms 67L9 & 68L15
Pilot Instructor Upgrade Training	AFMC Forms 67A2, 67L1 & 68L1
Flight Engineer Instructor Upgrade Training	AFMC Forms 67A2, 67L1 & 68L2
Navigator Instructor Upgrade Training	AFMC Forms 67A2, 67L2 & 68L3
Boom Operator Instructor Upgrade Training	AFMC Forms 67A2, 67L3 & 68L4

Attachment 13

C-141 TRAINING GUIDELINES

A13.1. GENERAL.

A13.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC C-141 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional C-141 continuation training requirements.

A13.1.2. Key Terms and Definitions.

A13.1.3. Aircrew Requirements and Qualifications.

A13.1.3.1. Navigator Requirements. The Flying Unit Commander will determine the requirement for the unit navigator crew complement based on flight manual and unit training requirements. Training tables and lessons outlined in this instruction address training required for the traditional navigator crew position.

A13.1.3.2. Aircrew Qualification. The C-141B and the C-141C aircraft are considered a single qualification upon completion of the applicable conversion training.

A13.1.3.3. Scanner Qualification. Scanners (i.e., flight engineers) will complete the appropriate formal training course according for AFSC 1A1XOC prior to performing scanner duties on any C-141 aircraft.

A13.2. AIRCRAFT QUALIFICATION TRAINING.

A13.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots, navigators, and flight engineers. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements as outlined in this section.

A13.2.2. Ground Training Requirements**.** Complete the training requirements outlined in **Table A13.1.** (pilots), **Table A13.2.** (flight engineers), and **Table A13.3.** (navigator). Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Emphasis should be placed on a thorough review of aircraft systems/equipment, cockpit orientation, and normal/emergency procedures. All systems and components not covered in training due to differences between the simulator and the C-141 being trained in, will be covered in detail by an instructor during the aircraft visit. Requalification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A13.2.2.1. Simulator Training. For local training ETCA formal simulator training is required and will be conducted IAW paragraph **2.3.2.**

A13.2.3. Flying Training Requirements.

A13.2.3.1. For student continuity, qualification flying training will be accomplished within the same C-141 aircraft category (C-141B or C-141C) to the maximum extent practical. Copilots will accomplish Phase I training in the right seat. However, those items accomplished in the left seat, such as engine start, taxi, etc., may be demonstrated to the student. To provide continuity of training, time between training flights will be kept to a minimum.

Table A13.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67M1	1) Formal School 2) AFMC Form 67M1
Flying Training	1) Formal School or 2) AFMC Form 68M1	1) Formal School 2) AFMC Form 68M1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A13.2. Flight Engineer Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67M2	1) Formal School 2) AFMC Form 67M2
Flying Training	1) Formal School or 2) AFMC Form 68M2	1) Formal School 2) AFMC Form 68M2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A13.3. Navigator Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67M3	1) Formal School 2) AFMC Form 67M3
Flying Training	1) Formal School or 2) AFMC Form 68M3	1) Formal School 2) AFMC Form 68M3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A13.2.4. Conversion Training.

A13.2.4.1. C-141 conversion training is required for pilots, navigators, and flight engineers to qualify in another C-141 aircraft category to include the C-141C or C-141B. C-141 conversion training requirements are outlined in **Table A13.4.**

Table A13.4. Pilot/Nav/Flight Engineer Conversion and Upgrade Training Requirements.

REQUIREMENT	CONVERSION TO C-141B	CONVERSION TO C-141C
Ground Training	1) Formal School or 2) AFMC Form 67M5	1) Formal School or 2) AFMC Form 67M4
Flying Training	1) Formal School or 2) AFMC Form 68M5	1) Formal School or 2) AFMC Form 68M4
Aircrew Exams	Not Required	Not Required

A13.3. MISSION QUALIFICATION TRAINING.

A13.3.1. General. **Table A13.5.** and **Table A13.6.** outline the minimum ground and flying training needed to qualify aircrew members in C-141 mission elements. AFMC prescribed C-141 mission qualification training includes FCF and Flight Test training. Additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A13.3.1.1. Pilots must be aircraft commander qualified prior to entering mission qualification training.

A13.3.2. Functional Check Flight (FCF) Training.

A13.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A13.5.** outlines the minimum ground and flying training needed to qualify aircrew members in the FCF mission. Pilots may complete qualification training from either seat. A C-141 instructor qualified in the FCF mission will administer ground and flying training.

Table A13.5. FCF Training.

REQUIREMENT	PILOT	NAVIGATOR	FLIGHT ENGINEER
Ground Training	AFMC Form 67M6 & 68M6	AFMC Form 67M7 & 68M8	AFMC Form 67M8 & 68M10
Flying Training	AFMC Form 68M7	AFMC Form 68M9	AFMC Form 68M11
Aircrew Exams	As required by unit CC	As required by unit CC	As required by unit CC

A13.3.2.2. Simulator Training Requirements. FCF mission qualification simulator or Cockpit Procedural Trainer (CPT) training is not required prior to beginning flying, except as directed by paragraph **3.4.2.**, but will be completed as early as possible.

A13.3.3. Flight Test Training.

A13.3.3.1. Flight Test training will be conducted IAW paragraph **3.10. Table A13.6.** outlines the minimum ground and flying training needed to qualify aircrew members in the Flight Test mission. A C-141 instructor qualified in the Flight Test mission will administer ground and flying training.

Table A13.6. Flight Test Training.

REQUIREMENT	PILOT/NAVIGATOR/FLIGHT ENGINEER
Ground Training	AFMC Form 67M9
Flying Training	AFMC Form 68M12
Aircrew Exams	As required by unit CC

A13.4. CONTINUATION TRAINING.

A13.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, C-141 aircrew members will also accomplish the requirements in **Table A13.7.** and **Table A13.8.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A13.7. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/FREQUENCY
C-141	Pilot	FCF Sortie	1/60
	Flight Engineer	FCF Sortie	1/60
	Navigator	FCF Sortie	1/60
	Pilot/Flight Engineer/Navigator	Flight Test Training	1/180

Table A13.8. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot, Copilot	Simulated Engine Out Approach	1	1	1	1	1	1
	Simulated Engine Out Missed Approach	1	1	1	1	1	1
	Simulated Engine Out Landing	1	1	1	1	1	1
	Holding	1	1	1	1	1	1
	No Flap Pattern and Landing	1	1	1	1	1	1

A13.4.2. FCF Currency Requirements. FCF currency is maintained by accomplishing an FCF sortie every 60 days IAW **Table A13.7.**

A13.4.2.1. Pilots accomplish a cross section of T.O. 1C-141B-6CF-1 systems checks to include a minimum of four in-flight checks from either the left or right seat.

A13.4.2.2. Flight engineers accomplish a cross section of T.O. 1C-141B-6CF-1 systems checks to include a minimum of two preflight and four in-flight checks while performing either flight engineer or scanner duties.

A13.4.3. FCF Recurrency Requirements. Aircrew members who exceed FCF currency requirements in **Table A13.7.** may regain currency by accomplishing an FCF sortie/profile with current/qualified

FCF instructor. Loss of currency exceeding 4 months requires FCF training IAW with requirements in **Table A13.5.** as applicable.

A13.4.3.1. Aircrew members who do not accomplish the required FCF proficiency sorties will not perform FCF system checks unless under the supervision of an instructor.

A13.4.4. Flight Test Currency/Recurrency Requirements:

A13.4.4.1. Flight Test currency is maintained by accomplishing Flight Test qualification ground training every 180 days.

A13.4.4.2. Aircrew members who exceed Flight Test currency requirements will not perform Flight Test missions until this training is completed.

A13.5. UPGRADE TRAINING. Upgrade training will be conducted IAW paragraph **5.3. Table A13.9.** and **Table A13.10.** outline the minimum ground and flying training required for aircraft commander, instructor pilot, instructor navigator and instructor flight engineer upgrade.

Table A13.9. Pilot Upgrade Training Requirements.

REQUIREMENT	AIRCRAFT COMMANDER UPGRADE	PILOT INSTRUCTOR UPGRADE
Ground Training	1) Formal School 2) AFMC Form 67M1	1) Formal School 2) AFMC Form 67M1
Flying Training	1) Formal School 2) AFMC Form 68M1	1) Formal School 2) AFMC Form 68M1
Aircrew Exams	As required by unit CC	As required by unit CC

Table A13.10. Navigator/Flight Engineer Upgrade Training Requirements.

REQUIREMENT	NAVIGATOR INSTRUCTOR UPGRADE	FLIGHT ENGINEER INSTRUCTOR UPGRADE
Ground Training	1) Formal School 2) AFMC Form 67M3	1) Formal School 2) AFMC Form 67M2
Flying Training	1) Formal School 2) AFMC Form 68M3	1) Formal School 2) AFMC Form 68M2
Aircrew Exams	As required by unit CC	As required by unit CC

A13.5.1. First Pilot Upgrade to Aircraft Commander. The primary method way to accomplish this training is at a formal school. If this is not practical, local upgrade training will consist of the ground and flying training events specified in **Table A13.9.**

A13.5.2. Instructor Pilot Upgrade. Instructor pilot upgrade training will consist of the ground and flying training specified in **Table A13.9.** Instructor pilot candidates will receive training while occupying the right seat.

A13.5.3. Instructor Flight Engineer Upgrade. Instructor Flight Engineer upgrade training will consist of the ground and flying training specified in **Table A13.9.**

A13.6. TRAINING RESTRICTIONS.

A13.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A13.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A13.8. C-141 TRAINING PLANS PRESCRIBED.

A13.8.1. General. C-141 prescribed training plans listed in **Table A13.11.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/ or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A13.11. C-141 Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67M1 & 68M1
Flight Engineer Qualification & Requalification Training	AFMC Forms 67M2 & 68M2
Navigator Qualification & Requalification Training	AFMC Forms 67M3 & 68M3
Pilot/Navigator/Flight Engineer C-141C Conversion Training	AFMC Forms 67M4 & 68M4
Pilot/Navigator/Flight Engineer C-141B Conversion Training	AFMC Forms 67M5 & 68M5
Pilot FCF Training	AFMC Forms 67M6, 68M6 & 68M7
Flight Engineer FCF Training	AFMC Forms 67M8, 68M10 & 68M11
Navigator FCF Training	AFMC Forms 67M7 & 68M8
Pilot/Navigator/Flight Engineer Flight Test Training	AFMC Forms 67M9 & 68M9
Aircraft Commander Training	AFMC Forms 67M1 & 68M1
Instructor Pilot Upgrade	AFMC Forms 67M1 & 68M1
Instructor Flight Engineer Upgrade	AFMC Forms 67M2 & 68M2
Instructor Navigator Upgrade	AFMC Forms 67M3 & 68M3

Attachment 14

F-4 TRAINING GUIDELINES

A14.1. GENERAL.

A14.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC F-4 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional F-4 continuation training requirements.

A14.1.2. Key Terms and Definitions.

A14.1.2.1. Aircraft Categories. For the purpose of qualification training, the following F-4 aircraft categories are defined:

A14.1.2.1.1. F-4C/D. F-4C/D aircraft series has leading edge flaps for landing and "hard wing" that allows for maneuvering up to 19.2 units AOA. These aircraft have more pronounced adverse yaw during maneuvering than F-4s with slats. These aircraft also contain a leading edge BLC or Boundary Layer Control system on the wings. This system provides extra lift with hot engine bleed air over the wings when the flaps are down. Emergency steps were added for malfunctions in this system. These aircraft have a deployable Ram Air Turbine (RAT) in case of double generator failures.

A14.1.2.1.2. F-4E/G. F-4E/G aircraft series has leading edge slats that allow for improved maneuvering up to 25 units AOA. The BLC system is removed from these models. The electrical system is reconfigured to the aircraft battery and removes the requirement for the RAT. The ’G’ model is a converted ’E’ model that includes the Wild Weasel avionics.

A14.1.2.1.3. QF-4. QF-4 aircraft are either the ’E’ or ’G’ models that contain the drone modification. A separate QF-4 checklist is used when this aircraft is a manned flyer. No difference exists to the basic aircraft when flying the QF-4 in the non-drone configuration.

A14.1.3. Aircrew Requirements and Qualifications.

A14.1.3.1. Aircrew Requirements. The flying unit commander will determine the requirement for crew complement based on flight manual and unit training requirements.

A14.2. AIRCRAFT QUALIFICATION TRAINING.

A14.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section. Units will send pilots through ACC F-4 training course for any Initial Qualification. Local qualification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A14.2.2. Ground Training Requirements.

A14.2.2.1. Aircrew will complete the F-4 ground training prescribed in **Table A14.1.** (pilot) and **Table A14.2.** (WSO). During local qualification training, cockpit procedures training (CPT), at the aircraft, in an aircrew training device, or in a table-top forum, will be accomplished prior to any flying training. All ground training will be accomplished by a current/qualified F-4 instructor.

Pilots must have a working knowledge of cautions, warnings, operating limitations, and emergency procedures associated with the aircraft before beginning flying training.

A14.2.2.2. Maximum use will be made of established ground training courses, to include simulator training, before entering flying training.

A14.2.3. Flying Training Requirements. Aircrew will complete the F-4 flying training prescribed in **Table A14.1.** (pilot) and **Table A14.2.** (WSO). To provide continuity of training, time between training flights will be kept to a minimum as defined in AFI 11-202, Volume 1.

A14.2.3.1. Pilot Training. The first requalification training flight for the F-4 will be flown with an instructor pilot on board the aircraft. All other F-4 flights may be accomplished with an instructor pilot providing instruction from a chase aircraft. Instructor WSOs will not perform instructional duties for pilots during Phase I training.

A14.2.3.2. Weapon System Operator (WSO) Training. WSO requalification training will consist of the following:

A14.2.3.2.1. WSOs will accomplish ground training as outlined in **Table A14.2.**

A14.2.3.2.2. Simulator training, if available, will be completed before beginning flying training.

Table A14.1. Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67N1 & 68N1	1) Formal School 2) AFMC Form 67N1 & 68N1
Flying Training	1) Formal School or 2) AFMC Form 68N2	1) Formal School 2) AFMC Form 68N2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

Table A14.2. WSO Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67N1	1) Formal School 2) AFMC Form 67N1
Flying Training	1) Formal School or 2) AFMC Form 68N2	1) Formal School 2) AFMC Form 68N2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A14.2.4. Conversion Training. F-4 conversion training is required for pilots and WSOs to qualify in another F-4 aircraft category to include the F-4C/D or F-4E. Conversion training requirements are outlined in **Table A14.3.**

A14.2.4.1. Ground Training Requirements. Conversion training for all model aircraft will consist of completion of the appropriate ground, CPT, and simulator training as specified in the Initial Qualification section of this volume. Emphasis of training will be placed upon the differences between the models of the F-4.

A14.2.4.2. Flying Training Requirements. A minimum of one flight will be flown using applicable training events as required by AFI 11-202V1 and command guidance. Additional training requirements will be as outlined by the flying unit commander.

Table A14.3. Pilot/WSO Conversion and Upgrade Training Requirements.

REQUIREMENT	CONVERSION BETWEEN F-4 C/D & F-4E	INSTRUCTOR UPGRADE
Ground Training	1) Formal School or 2) AFMC Form 67N1	1) Formal School or 2) AFMC Form 67N1
Flying Training	1) Formal School or 2) AFMC Form 68N2	1) Formal School or 2) AFMC Form 68N2
Aircrew Proficiency Exams	Not Required	As required by Unit CC

A14.3. MISSION QUALIFICATION TRAINING.

A14.3.1. General. AFMC prescribed F-4 mission qualification training includes FCF and Low Altitude Step Down Training (LASDT). Flight Test training. Unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction. Aircrew members will normally obtain mission qualification training from non-AFMC (using command) sources.

A14.3.2. Basic formation skills are not required for initial qualification in the F-4. Therefore, mission qualification training will include instruction in basic formation (fingertip, route, tactical, chase, formation takeoffs and landings, cross-unders, and rejoins) as applicable to the unit mission.

A14.3.3. Functional Check Flight (FCF) Training.

A14.3.3.1. FCF training will be conducted IAW paragraph **3.4.** Aircrew members will obtain FCF mission qualification training from non-AFMC (using command) sources. Local FCF training must use a HQ AFMC approved FCF training program. An F-4 instructor qualified in the FCF mission will administer ground and flying training.

A14.3.4. Low Altitude Step Down Training (LASDT). If the flying unit commander determines that flying low level below 500 feet is a mission requirement, aircrews must complete a HQ AFMC approved LASDT program. LASDT will be conducted IAW paragraph **3.7.**

A14.4. CONTINUATION TRAINING.

A14.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, F-4 aircrew members will also accomplish the requirements in **Table A14.4.** and **Table A14.5.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

A14.4.2. The F-4 C/D and F-4E/G are considered the same series for the purpose of maintaining currency according to AFI 11-202, Volume 1. Recurring qualification and instrument evaluations may be taken in either airframe. The flying unit commander may specify additional currency and proficiency requirements upon aircrews for specific categories of the F-4.

Table A14.4. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/FREQUENCY
F-4	Pilot	FCF Sortie	1/90
	Pilot	LASDT	1/90
	WSO	FCF Sortie	1/90
	WSO	LASDT	1/90

Table A14.5. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Simulated Single Engine (SSE) Approach	3	3	2	2	1	1
	No Slat/Flap Approach	3	3	2	2	1	1

A14.4.3. LASDT Currency/Recurrency Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A14.4.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A14.4.4. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 90 days. Aircrew members who exceed FCF currency requirements in **Table A14.4.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A14.5. UPGRADE TRAINING.

A14.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots and WSOs selected for upgrade training to instructor status will complete the requirements in **Table A14.6.** During training, rear-cockpit landing proficiency must be demonstrated before the IP upgrade flight evaluation.

Table A14.6. F-4 Upgrade Training Requirements.

REQUIREMENT	TO INSTRUCTOR PILOT	TO INSTRUCTOR WSO
Ground Training	1) Formal School 2) AFMC 67N1	1) Formal School 2) AFMC 67N1
Flying Training	1) Formal School 2) AFMC 68N2	1) Formal School 2) AFMC 68N2
Aircrew Exams	Not Required	Not Required

A14.6. TRAINING RESTRICTIONS.

A14.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A14.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A14.8. F-4 TRAINING PLANS PRESCRIBED.

A14.8.1. General. F-4 prescribed training plans listed in **Table A14.7.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A14.7. F-4 Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67N1, 68N1 & N2
WSO Qualification & Requalification Training	AFMC Forms 67N1 & 68N2
Pilot/WSO Conversion Training (Between F-4D and F-4E)	AFMC Forms 67N1 & 68N2
Pilot/WSO Instructor Upgrade	AFMC Forms 67N1 & 68N2
WSO Instructor Pilot	AFMC Forms 67N1 & 68N2

Attachment 15

F-15 TRAINING GUIDELINES

A15.1. GENERAL.

A15.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC F-15 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional F-15 continuation training requirements.

A15.1.2. Key Terms and Definitions.

A15.1.2.1. Minimum Safe Altitude (MSA). 1,000 ft above the highest obstacle in the defined training area or within 5 NM either side of the leg of the planned route for low-level operations.

A15.1.2.2. NVG Medium Altitude. NVG augmented flight at or above the Minimum Safe Altitude (MSA).

A15.1.2.3. NVG Low Altitude. NVG augmented flight at or above 1000' AGL but below the MSA.

A15.1.3. Aircrew Requirements and Qualifications.

A15.1.3.1. Aircrew Requirements. The flying unit commander will determine the requirement for crew complement based on flight manual and unit training requirements.

A15.2. AIRCRAFT QUALIFICATION TRAINING.

A15.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section. Local qualification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A15.2.2. Ground Training Requirements.

A15.2.2.1. Aircrew will complete the F-15 ground training prescribed in **Table A15.1.** and **Table A15.2.** During local qualification training, cockpit procedures training (CPT), at the aircraft, in an aircrew training device, or in a table-top forum, will be accomplished prior to any flying training. All ground training will be accomplished by a current/qualified F-15 instructor. Pilots and WSOs must have a working knowledge of cautions, warnings, operating limitations, and emergency procedures associated with the aircraft before beginning flying training.

A15.2.2.2. Maximum use will be made of established ground training courses, to include simulator training, before entering flying training.

A15.2.3. Flying Training Requirements. Aircrew will complete the F-15 flying training prescribed in **Table A15.1.** (F-15A-D) and **Table A15.2.** (F-15E). To provide continuity of training, time between training flights will be kept to a minimum as defined in AFI 11-202, Volume 1.

A15.2.3.1. Pilot Training. The first qualification training flight for F-15A/B/C/D or F-15E models will be flown in an F-15 B/D or F-15E with an instructor pilot on board the aircraft. All other F-15A/B/C/D or F-15E flights may be accomplished with an instructor pilot providing instruction

from a chase aircraft. Instructor WSOs will not perform instructional duties for pilots during Phase I training.

A15.2.4. Weapon System Officer (WSO) Training. WSO initial qualification and requalification training must consist of the following:

A15.2.4.1. WSOs will accomplish ground training as outlined in **Table A15.1.** or **Table A15.2.**

A15.2.4.2. Simulator training for F-15E WSO initial/requalification will be completed before beginning flying training. No simulator training is required for F-15 B/D WSO requalificaiton.

A15.2.4.3. One sortie (minimum) is required for requalification.

Table A15.1. F-15A-D Pilot/WSO Qualification/Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training (1)	1) Formal School 2) AFMC Form 67O1, 68O1 & 68O2	1) Formal School 2) AFMC Form 67O1, 68O1 & 68O2
Flying Training	1) Formal School or 2) AFMC Form 68O3	1) Formal School 2) AFMC Form 68O3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

NOTE:

   1. Simulator requirement is not applicable to WSOs.

Table A15.2. F-15E Pilot/WSO Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67O2, 68O4 & 68O5	1) Formal School 2) AFMC Form 67O2, 68O4 & 68O5
Flying Training	1) Formal School or 2) AFMC Form 68O6	1) Formal School 2) AFMC Form 68O6

A15.2.5. Conversion Training. F-15 conversion training is required for pilots and WSOs to qualify in another F-15 aircraft category to include the F-15B/D or F-15E. Conversion training requirements are outlined in **Table A15.3.**

A15.2.5.1. Ground Training Requirements. Local conversion training for all model aircraft will consist of completion of the appropriate ground, CPT, and simulator training as specified in paragraph **2.3.2.** of this instruction. Emphasis of training will be placed upon the differences between

the models of the F-15. WSOs converting from the F-15E to an F-15B/D require ground training only.

A15.2.5.2. Flying Training Requirements. For local conversion training aircrew will use the requalification requirements specified on the applicable AFMC Form 68. Additional training requirements will be as outlined by the flying unit commander. WSOs converting from the F-15E to an F-15B/D do not require flying training.

Table A15.3. Pilot/WSO Conversion Training Requirements.

REQUIREMENT	CONVERSION TO F-15A/B/C/D	CONVERSION TO F-15E
Ground Training	1) Formal School or 2) AFMC Form 67O1, 68O1 & 68O2	1) Formal School or 2) AFMC Form 67O2, 68O4 & 68O5
Flying Training	1) Formal School or 2) AFMC Form 68O3	1) Formal School or 2) AFMC Form 68O6
Aircrew Proficiency Exams	Not Required	As required by unit CC

A15.3. MISSION QUALIFICATION TRAINING.

A15.3.1. General. Table A15.4. and Table A15.5. outline the minimum ground and flying training needed to qualify aircrew members in F-15 mission elements. AFMC prescribed F-15 mission qualification training includes FCF, Low Altitude Step Down Training (LASDT), Weapons Delivery, and Night Vision Goggle (NVG) training. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A15.3.1.1. Mission training for the F-15E may be accomplished using either an instructor pilot or instructor WSO who is qualified for the specific mission/tasks to be taught IAW paragraph 1.7.8. or unless specified otherwise in this section.

A15.3.1.2. Basic formation skills are not required for initial qualification in the F-15. Therefore, mission qualification training will include instruction in basic formation (fingertip, route, tactical, chase, formation takeoffs and landings, cross-unders, rejoins) as applicable to the unit mission.

A15.3.2. Functional Check Flight (FCF) Training.

A15.3.2.1. FCF training will be conducted IAW paragraph 3.4. Table A15.4. outlines the minimum ground and flying training needed to qualify pilots in the FCF mission. A F-15 instructor qualified in the FCF mission will administer ground and flying training.

A15.3.3. Low Altitude Step Down Training (LASDT). If the flying unit commander determines that flying low level below 500 feet is a mission requirement, aircrews must complete a HQ AFMC approved LASDT program. LASDT will be conducted IAW paragraph 3.7. Table A15.4. outlines the minimum ground and flying training required to qualify aircrew in the LASDT mission.

A15.3.4. Weapons Delivery (WD) Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8.**

A15.3.4.1. Air-to-ground weapons delivery training may be conducted in conjunction with Terrain Following (TF) training.

Table A15.4. Pilot/WSO FCF, LASDT, and Weapons Delivery Training Requirements.

REQUIREMENT	FCF	LASDT	WEAPONS DELIVERY
Ground Training	AFMC Form 67O3	AFMC Form 67O4	Unit Developed
Flying Training	AFMC Form 68O8	AFMC Form 68O9	Unit Developed
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC

A15.3.5. Night Vision Goggle (NVG) Training. If the flying unit commander determines that NVG is a mission requirement, aircrews will complete the AFMC prescribed NVG training program. NVG training will be conducted IAW paragraph **3.9.** and this section. This provides guidance to designated aircrew for medium and low altitude night flight using NVGs. All training will be accomplished in a build-up fashion. Aircrew will accomplish ground training before flying training, and medium altitude events prior to low altitude events. All training sorties will be flown in two seat F-15s. Minimum of 50 hours total time in the F-15. Daytime air-to-ground qualification is required prior to accomplishing NVG weapon delivery events.

A15.3.5.1. Ground Training. Crewmembers must receive NVG academic training as outlined in **Table A15.5.** prior to their initial flight with NVGs. This training will be conducted by Air Force Research Laboratory, Warfighter Training Research Division (AFRL/HEA) instructors at Luke AFB, AZ, or by a qualified NVG academic instructor (one who has attended the AFRL NVG course). If NVG academic training is conducted locally, the NVG academic instructor should be assisted by a flight surgeon or aerospace physiologist familiar with the physiological limitations of NVGs or night flying.

A15.3.5.2. Flying Training. Crewmembers must receive NVG flying training as outlined in **Table A15.5.** NVG qualification at medium altitude will consist of one dual sortie under the direct supervision of an F-15 NVG IP. NVG qualification at low will consist of a second dual sortie with a F-15 qualified low altitude NVG IP.

A15.3.5.3. Instructor Qualification. Crewmembers upgrading to instructor will complete training outlined in **Table A15.5.** Aircrew require a minimum of five NVG sorties (pilots in front cockpit) prior to the medium altitude NVG IP/IW upgrade. Medium altitude instructor upgrade sorties will be flown in the rear cockpit under the direct supervision of an F-15 qualified NVG IP. Pilots require a minimum of five low altitude NVG sorties and be a medium altitude NVG IP prior to the low altitude NVG IP upgrade. . Low altitude instructor upgrade sorties will be flown in the rear cockpit under the direct supervision of an F-15 qualified Low altitude NVG IP.

A15.3.6. Air-to-Air Training. This training will be accomplished to the maximum extent possible in conjunction with an ETCA formal qualification course. For local qualification training, if the flying unit commander determines that air-to-air training is a mission requirement, aircrews must complete a HQ AFMC approved air-to-air training program.

Table A15.5. Pilot/WSO Night Vision Goggle Training Requirements.

REQUIREMENT	Medium Altitude	Low Altitude	Medium Altitude Instructor	Medium Altitude Instructor
Ground Training	AFMC Form 67O5	AFMC Form 67O5	AFMC Form 67O5	AFMC Form 67O5
Flying Training	AFMC Form 68O10	AFMC Form 68O11	AFMC Form 68O12	AFMC Form 68O13
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required By unit CC	As Required by unit CC

A15.4. CONTINUATION TRAINING.

A15.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, F-15 aircrew members will also accomplish the requirements in **Table A15.6.** and **Table A15.7..** The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

A15.4.2. The F-15A-D and F-15E are considered the same series for the purpose of maintaining currency according to AFI 11-202, Volume 1. Recurring qualification and instrument evaluations may be taken in either airframe. The flying unit commander may specify additional currency and proficiency requirements upon aircrews for specific categories of the F-15.

Table A15.6. Additional F-15 Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/ FREQUENCY
F-15	Pilot	FCF Sortie	1/90
		Chase Sortie	1/180
		LASDT	1/90
		Weapons Delivery Sortie	1/180
		NVG (Medium Altitude) Sortie (1)	1/180
		NVG (Low Altitude) Sortie (1)	1/90
	WSO	FCF Sortie	1/90
		LASDT	1/90
		NVG (Medium Altitude) Sortie	1/180
		NVG (Low Altitude) Sortie	1/90
		Weapons Delivery Sortie	1/180

NOTE:

1. NVG IPs may update NVG currency from the rear cockpit.

Table A15.7. Additional F-15 Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Chase Sortie	3	3	2	2	1	1

A15.4.3. FCF Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 90 days. Aircrew members who exceed FCF currency requirements in **Table A15.6.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A15.4.4. LASDT Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A15.6.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A15.4.5. Weapons Delivery Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed Weapons Delivery currency requirements in **Table A15.6.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires Weapons Delivery mission qualification training.

A15.4.6. Air-to-Air Training Requirements. The flying unit commander will specify air-to-air training currency/proficiency requirements to achieve and acceptable level of proficiency to support air-to-air mission readiness.

A15.4.7. Night Vision Goggle Requirements. In addition to the requirements outlined in this section, the flying unit commander may specify additional NVG requirements to achieve and acceptable level of proficiency to support NVG mission readiness.

A15.4.7.1. Medium Altitude NVG. Medium Altitude NVG currency may be updated by accomplishing an NVG sortie every 180 days IAW **Table A15.6.** Aircrew members who exceed NVG currency requirements in **Table A15.6.** may regain currency by flying an NVG sortie under the direct supervision of an NVG instructor of like specialty.

A15.4.7.2. Low Altitude NVG. Low Altitude NVG currency may be updated by flying a minimum of 15 minutes below the MSA every 90 days. Aircrew members who exceed Low Altitude NVG currency requirements in **Table A15.6.** may regain currency by flying 15 minutes below MSA under the direct supervision of an NVG instructor pilot.

A15.5. UPGRADE TRAINING.

A15.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots and WSOs selected for upgrade training to instructor status will complete the requirements in **Table A15.8.** Ground training will be completed prior to beginning flying training.

A15.5.2. Instructor pilot upgrade training may be accomplished in either single seat or two-seat aircraft. Rear-cockpit landing proficiency must be demonstrated before the IP upgrade flight evaluation.

Table A15.8. F-15 Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR PILOT (F-15A-D)	INSTRUCTOR PILOT (F-15E)	INSTRUCTOR WSO (F-15A-E)
Ground Training	1) Formal School 2) AFMC Form 67A2	1) Formal School 2) AFMC Form 67A2	1) Formal School 2) AFMC Form 67A2
Flying Training	1) Formal School 2) AFMC Form 68O3	1) Formal School 2) AFMC Form 68O6	1) Formal School 2) AFMC Form 68O7
Aircrew Exams		Not Required	Not Required

A15.6. TRAINING RESTRICTIONS.

A15.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A15.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A15.8. F-15 TRAINING PLANS PRESCRIBED.

A15.8.1. General. F-15 prescribed training plans listed in **Table A15.9.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A15.9. PRESCRIBED TRAINING PLANS.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot/WSO Qualification & Requalification Training (F-15A-D)	AFMC Forms 67O1, 68O1, 68O2 & 68O3
Pilot/WSO Qualification & Requalification Training (F-15E)	AFMC Forms 67O2, 68O4, 68O5 & 68O6
Pilot/WSO Conversion Training (F-15 A-D)	AFMC Forms 67O1, 68O1, 68O2 & 68O3
Pilot/WSO F-15E Conversion Training (F-15E)	AFMC Forms 67O2, 68O4, 68O5 & 68O6
Pilot FCF Training	AFMC Forms 67O3 & 68O8
Pilot LASDT	AFMC Forms 67O4 & 6809
Pilot/WSO (Medium Altitude) NVG Training	AFMC Forms 67O5 & 6810
Pilot/WSO (Low Altitude) NVG Training	AFMC Forms 67O5 & 6811
Pilot/WSO (Medium Altitude) NVG Instructor Upgrade Training	AFMC Forms 67O5 & 6812
Pilot (Low Altitude) NVG Instructor Upgrade Training	AFMC Forms 67O5 & 6813
Pilot Instructor Upgrade (F-15 A-D)	AFMC Forms 67A2, 67O1 & 68O3
Pilot Instructor Upgrade (F-15 E)	AFMC Forms 67A2, 67O2 & 68O6
WSO Instructor Upgrade	AFMC Forms 67A2, 67O1, 67O2 & 68O7

Attachment 16

F-16 TRAINING GUIDELINES

A16.1. GENERAL.

A16.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC F-16 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional F-16 continuation training requirements.

A16.1.2. Key Terms and Definitions.

A16.1.2.1. Aircraft Categories. For the purpose of F-16 qualification training, the following F-16 aircraft categories are defined:

A16.1.2.1.1. F-16A/B. F-16 aircraft series to include Block 10/15/20 upgrades.

A16.1.2.1.2. F-16C/CG/CJ aircraft series to include Block 25-52 upgrades.

A16.1.2.2. MMC. F-16 aircraft series equipped with the Modular Mission Computer.

A16.1.2.3. MLU. F-16A/B aircraft series retrofitted with the Mid-Life Update hardware/software enhancements.

A16.1.3. Aircrew Requirements and Qualifications.

A16.1.3.1. Aircrew Requirements. The flying unit commander will determine the requirement for crew complement based on flight manual and unit training requirements.

A16.2. AIRCRAFT QUALIFICATION TRAINING.

A16.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section. Local qualification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A16.2.2. Ground Training Requirements.

A16.2.2.1. Aircrew will complete the F-16 ground training prescribed in **Table A16.1.** During local qualification training, cockpit procedures training (CPT), at the aircraft, in an aircrew training device, or in a table-top forum, will be accomplished prior to any flying training. All ground training will be accomplished by a current/qualified F-16 instructor. Pilots and WSOs must have a working knowledge of cautions, warnings, operating limitations, and emergency procedures associated with the aircraft before beginning flying training. This basic knowledge will include procedures for utilizing the radar to avoid thunderstorms and severe weather.

A16.2.2.2. Maximum use will be made of established ground training courses, to include simulator training, before entering flying training.

A16.2.3. Flying Training Requirements. Aircrew will complete the F-16 flying training prescribed in **Table A16.1.** To provide continuity of training, time between training flights will be kept to a minimum as defined in AFI 11-202, Volume 1.

A16.2.3.1. Pilot Training. The first qualification training flight for any F-16 model will be flown in an F-16 B/D with an instructor pilot on board the aircraft. All other flights may be accomplished with an instructor pilot providing instruction from a chase aircraft

Table A16.1. F-16 Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67P1, 68P1, & 68P2	1) Formal School 2) AFMC Form 67P1, 68P1, & 68P2
Flying Training	1) Formal School or 2) AFMC Form 68P3	1) Formal School 2) AFMC Form 68P3
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A16.2.4. Conversion Training. F-16 conversion training is required for pilots to qualify in another F-16 aircraft category to include the F-16A/B or F-16C/CG/CJ/MLU/MMC. Conversion training requirements are outlined in **Table A16.2.**

A16.2.4.1. Ground Training Requirements. Local conversion training for all model aircraft will consist of completion of the appropriate ground, CPT, and simulator training as specified in paragraph **2.3.2.** of this instruction. Emphasis of training will be placed upon the differences between the models of the F-16.

A16.2.4.2. Flying Training Requirements. One sortie (minimum) is required to complete conversion training. Additional flying training requirements will be as outlined by the flying unit commander.

A16.2.5. Difference Training. F-16 difference training is required for pilots to qualify in a different engine to include the PW200/220/229 or the GE100/129. Difference training requirements are outlined in **Table A16.2.** Each engine requires separate ground training.

Table A16.2. Pilot Conversion and Instructor Upgrade Training Requirements.

REQUIREMENT	CONVERSION TO F-16A/B	CONVERSION TO F-16C/CG/CJ	DIFFERENCE (PW/GE ENGINES)
Ground Training	1) Formal School or 2) AFMC Form 67P4	1) Formal School or 2) AFMC Form 67P5	AFMC Form 67P3
Flying Training	1) Formal School or 2) AFMC Form 68P4	1) Formal School or 2) AFMC Form 68P5	Not Required
Proficiency Exams	As required by unit CC	As required by unit CC	As required by unit CC

A16.3. MISSION QUALIFICATION TRAINING.

A16.3.1. General. **Table A16.3.** and **Table A16.4.** outlines the minimum ground and flying training needed to qualify aircrew members in F-16 mission elements. AFMC prescribed F-16 mission quali-fication training includes FCF, Low Altitude Step Down Training (LASDT), Weapons Delivery and NVG. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruc-tion.

A16.3.1.1. Basic formation skills are not required for initial qualification in the F-16. Therefore, mission qualification training will include instruction in basic formation (fingertip, route, tactical, chase, formation takeoffs and landings, cross-unders, rejoins) as applicable to the unit mission.

A16.3.2. Functional Check Flight (FCF) Training.

A16.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A16.3.** outlines the mini-mum ground and flying training needed to qualify pilots in the FCF mission. A F-16 instructor qualified in the FCF mission will administer ground and flying training.

A16.3.3. Low Altitude Step Down Training (LASDT). If the flying unit commander determines that flying low level below 500 feet is a mission requirement, aircrews must complete a HQ AFMC approved LASDT program. LASDT will be conducted IAW paragraph **3.7. Table A16.3.** outlines the minimum ground and flying training needed to qualify pilots in the LASDT mission. An F-16 instruc-tor qualified in the LASDT mission will administer ground and flying training.

A16.3.4. Weapons Delivery Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8.**

A16.3.4.1. Weapons Delivery training may be conducted in conjunction with Terrain Following (TF) training.

A16.3.4.2. Aircrew must have completed and be current in LASDT prior to conducting air-to-ground delivery training where delivery or recovery altitudes will be less than 500 feet AGL.

Table A16.3. Pilot FCF, LASDT, and Weapons Delivery Training Requirements.

REQUIREMENT	FCF	LASDT	WEAPONS DELIVERY
Ground Training	AFMC Form 67P6	AFMC Form 67P7	Unit Developed
Flying Training	AFMC Form 68P6	AFMC Form 68P7	Unit Developed
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required By unit CC

A16.3.5. Night Vision Goggle (NVG) Training. If the flying unit commander determines that NVG is a mission requirement, aircrews will complete the AFMC prescribed NVG training program. NVG training will be conducted IAW paragraph **3.9.** and this section. This provides guidance to designated aircrew for medium and low altitude night flight using NVGs. All training will be accomplished in a build-up fashion. Aircrew will accomplish ground training before flying training, and medium altitude events prior to low altitude events. All training sorties will be flown in two seat F-16s. Minimum of 50

hours total time in the F-16. Daytime air-to-ground qualification is required prior to accomplishing NVG weapon delivery events.

A16.3.5.1. Ground Training. Crewmembers must receive NVG academic training as outlined in **Table A16.4.** prior to their initial flight with NVGs. This training will be conducted by Air Force Research Laboratory, Warfighter Training Research Division (AFRL/HEA) instructors at Luke AFB, AZ, or by a qualified NVG academic instructor (one who has attended the AFRL NVG course). If NVG academic training is conducted locally, the NVG academic instructor should be assisted by a flight surgeon or aerospace physiologist familiar with the physiological limitations of NVGs or night flying.

A16.3.5.2. Flying Training. Crewmembers must receive NVG flying training as outlined in **Table A16.4.** NVG qualification at medium altitude will consist of one dual sortie under the direct supervision of an F-16 NVG IP. NVG qualification at low will consist of a second dual sortie with an F-16 qualified low altitude NVG IP.

A16.3.5.3. Instructor Qualification. Crewmembers upgrading to instructor will complete training outlined in **Table A16.4.** Aircrew require a minimum of five NVG sorties (pilots in front cockpit) prior to the medium altitude NVG IP/IW upgrade. Medium altitude instructor upgrade sorties will be flown in the rear cockpit under the direct supervision of an F-16 qualified NVG IP. Pilots require a minimum of five low altitude NVG sorties and be a medium altitude NVG IP prior to the low altitude NVG IP upgrade. Low altitude instructor upgrade sorties will be flown in the rear cockpit under the direct supervision of an F-16 qualified Low altitude NVG IP.

A16.3.6. Air-to-Air Training. This training will be accomplished to the maximum extent possible in conjunction with an ETCA formal qualification course. For local qualification training, if the flying unit commander determines that air-to-air training is a mission requirement, aircrews must complete a HQ AFMC approved air-to-air training program.

Table A16.4. Pilot Night Vision Goggle Training Requirements.

REQUIREMENT	Medium Altitude	Low Altitude	Medium Altitude Instructor	Low Altitude Instructor
Ground Training	AFMC Form 67P8	AFMC Form 67P8	AFMC Form 67P8	AFMC Form 67P8
Flying Training	AFMC Form 68P8	AFMC Form 68P9	AFMC Form 68P8	AFMC Form 68P9
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required By unit CC	As Required by unit CC

A16.4. CONTINUATION TRAINING.

A16.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, F-16 aircrew members will also accomplish the requirements in **Table A16.5.** and **A16.6.** The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

A16.4.2. The F-16A/B and F-16C/CG/CJ are considered the same series for the purpose of maintaining currency according to AFI 11-202, Volume 1. Recurring qualification and instrument evaluations

may be taken in either airframe. The flying unit commander may specify additional currency and proficiency requirements upon aircrews for specific categories of the F-16.

Table A16.5. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/FREQUENCY
F-16	Pilot	Simulated Flameout Approach	1/45
		FCF Sortie	1/90
		Chase Sortie	1/180
		LASDT	1/90
		Weapons Delivery Sortie	1/180
		NVG (Medium Altitude) Sortie (1)	1/180
		NVG (Low Altitude) Sortie (1)	1/90

NOTE:

    1.   NVG IPs may update NVG currency from the rear cockpit.

Table A16.6. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Simulated Flameout Approach (SFO)	6	6	4	4	2	2
	BUC Start	1	1	1	1	1	1
	Chase Sortie	3	3	2	2	1	1

A16.4.3. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 90 days. Aircrew members who exceed FCF currency requirements in **Table A16.5.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A16.4.4. LASDT Currency/Recurrency Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A16.5.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A16.4.5. Weapons Delivery Currency/Recurrency Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed WD currency requirements in **Table A16.5.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires WD mission qualification training.

A16.4.6. Night Vision Goggle Requirements. In addition to the requirements outlined in this section, the flying unit commander may specify additional NVG requirements to achieve and acceptable level of proficiency to support NVG mission readiness.

A16.4.6.1. Medium Altitude NVG. Medium Altitude NVG currency may be updated by accomplishing an NVG sortie every 180 days. Aircrew members who exceed NVG currency requirements in **Table A16.5.** may regain currency by flying an NVG sortie under the direct supervision of an NVG instructor of like specialty.

A16.4.6.2. Low Altitude NVG. Low Altitude NVG currency may be updated by flying a minimum of 15 minutes below the MSA every 90 days. Aircrew members who exceed Low Altitude NVG currency requirements in **Table A16.5.** may regain currency by flying 15 minutes below MSA under the direct supervision of an NVG instructor pilot.

A16.5. UPGRADE TRAINING.

A16.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots selected for upgrade training to instructor status will complete the requirements in **Table A16.7.** Ground training will be completed prior to beginning flying training.

A16.5.2. Instructor pilot upgrade training may be accomplished in either single seat or two-seat aircraft. Rear-cockpit landing proficiency must be demonstrated before the IP upgrade flight evaluation.

Table A16.7. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67P1
Flying Training	AFMC Form 68P3
Aircrew Exams	As required by unit CC

A16.6. TRAINING RESTRICTIONS.

A16.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A16.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A16.8. F-16 TRAINING PLANS PRESCRIBED.

A16.8.1. General. F-16 prescribed training plans listed in **Table A16.8.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A16.8. – F-16 PRESCRIBED TRAINING PLANS.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification, Requalification, and Instructor Upgrade Training	AFMC Forms 67P1, 68P1, P2, & P3
Pilot Conversion Training (to F-16 A/B)	AFMC Forms 67P4 & 68P4
Pilot Conversion Training (to F-16C/CG/CJ/MLU/MMC)	AFMC Forms 67P5 & 68P5
Pilot Difference Training (PW/GE Engines)	AFMC Forms 67P3
Pilot FCF Training	AFMC Forms 67P6 & 68P6
Pilot LASDT	AFMC Forms 67P7 & 68P7
Pilot (Medium Altitude) NVG Training	AFMC Forms 67P8 & 68P8
Pilot (Low Altitude) NVG Training	AFMC Forms 67P8 & 68P9
Pilot (Medium Altitude) NVG Instructor Upgrade Training	AFMC Forms 67P8 & 68P8
Pilot (Low Altitude) NVG Instructor Upgrade Training	AFMC Forms 67P8 & 68P9
Instructor Pilot	AFMC Forms 67A2, 67P1 & 68P3

Attachment 17

F-117 TRAINING GUIDELINES

A17.1. GENERAL.

A17.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC F-117 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional F-117 continuation training requirements.

A17.1.2. Key Terms and Definitions.

A17.1.3. Aircrew Requirements and Qualifications.

A17.2. AIRCRAFT QUALIFICATION TRAINING.

A17.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section. Local qualification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A17.2.2. Ground Training Requirements.

A17.2.2.1. Aircrew will complete the F-117 ground training prescribed in **Table A17.1.** During local requalification training, cockpit procedures training (CPT), at the aircraft, in an aircrew training device, or in a table-top forum, will be accomplished prior to any flying training. All ground training will be accomplished by a current/qualified F-117 instructor. Pilots must have a working knowledge of cautions, warnings, operating limitations, and emergency procedures associated with the aircraft before beginning flying training. This basic knowledge will include procedures for utilizing the radar to avoid thunderstorms and severe weather.

A17.2.2.2. Maximum use will be made of ETCA formal training courses before, to include simulator training, entering flying training. If AFMC instructors are not available, ACC instructors may be used to support ground training.

A17.2.3. Flying Training Requirements. Aircrew will complete the F-117 flying training prescribed in **Table A17.1.** To provide continuity of training, time between training flights will be kept to a minimum as defined in AFI 11-202, Volume 1. All qualification training sorties will be accomplished with the most current available avionics suite. Accomplish all initial qualification training in the same avionics suite to the maximum extent possible.

A17.2.3.1. Night Qualification Requirements. The first night training sortie will be flown with an avionics suite that the trainee has already flown. Night qualification training will be flown single-ship with an instructor pilot available on the ground for the duration of the flight. The instructor pilot will visually monitor the initial takeoff and all landings and accomplish a post-flight review of the HUD video.

Table A17.1. F-117 Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67R1 & 68R1	1) Formal School 2) AFMC Form 67R1 & 68 R1
Flying Training	1) Formal School or 2) AFMC Form 68R2	1) Formal School 2) AFMC Form 68R2
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A17.3. MISSION QUALIFICATION TRAINING.

A17.3.1. General. **Table A17.2.** outlines the minimum ground and flying training needed to qualify aircrew members in F-117 mission elements. AFMC prescribed F-117 mission qualification training includes FCF, Photo/Safety Chase, Aerial Demonstration, and Advanced Handling. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A17.3.1.1. Basic formation skills are not required for initial qualification in the F-117. Therefore, mission qualification training will include instruction in basic formation (fingertip, route, tactical, chase, formation takeoffs and landings, cross-unders, rejoins) as applicable to the unit mission.

A17.3.2. Functional Check Flight (FCF) Training.

A17.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A17.2.** outlines the minimum ground and flying training needed to qualify pilots in the FCF mission. A F-117 instructor qualified in the FCF mission will administer ground and flying training.

A17.3.3. Chase Training. Photo/Safety Chase will be conducted IAW paragraph **3.6. Table A17.2.** outlines the minimum ground and flying training required to qualify pilots in the Photo/Safety Chase mission.

A17.3.3.1. Pilots not qualified in the F-117 will accomplish training outlined in **Table A17.2.** prior to chasing the F-117 regardless of designated chase platform.

A17.3.4. Advanced Handling (AH) Training. If the flying unit commander determines that advance handling is a mission requirement, aircrews must complete a HQ AFMC approved AH training program.

A17.3.4.1. An instructor pilot will chase all advanced handling sorties.

A17.3.4.2. Training will emphasize the importance of achieving minimum entry airspeed and available G for over-the-top maneuvers.

A17.3.5. Air Demonstration Pilot. This training will be accomplished to support aerobatics demonstrations. Air show demonstrations pilots will be designated and trained IAW with USAF, AFMC, and applicable local (i.e. AFFTC Air Show OPLAN) instructions.

A17.3.5.1. Advanced Handling qualification is a prerequisite for Air Demonstration Pilot training.

Table A17.2. Pilot FCF, Advanced Handling, Aerial Demo, and Chase Training Requirements.

REQUIREMENT	FCF	CHASE	ADVANCED HANDLING	AERIAL DEMO
Ground Training	Unit Developed	AFMC Form 67R3	AFMC Form 67R4	AFMC Form 67R2
Flying Training	Unit Developed	AFMC Form 68R5	AFMC Form 68R3	AFMC Form 68R4
Aircrew Exams	As Required by unit CC	As Required By unit CC	As Required by unit CC	As Required by unit CC

A17.4. CONTINUATION TRAINING.

A17.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, F-117 aircrew members will also accomplish the requirements in **Table A17.3.** and **Table A17.4.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A17.3. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/FREQUENCY
F-117	Pilot	Air Refueling Contact	1/180
		FCF Sortie	1/90
		Chase	1/90
		Air Demonstration	1/45

Table A17.4. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Chase Sortie	3	3	2	2	1	1

A17.4.2. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 90 days. Aircrew members who exceed FCF currency requirements in **Table A17.3.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A17.4.3. Advance Handling Currency/Recurrency Requirements. Advanced Handling currency/ recurrency requirements will be specified as required by the flying unit commander.

A17.4.4. Air Demonstration Currency/Recurrency Requirements. Air Demonstration currency is updated by accomplishing an air demonstration event every 45 days. Pilots who exceed Air Demonstration currency requirements in **Table A17.3.** may regain currency by flying an Air Demonstration profile under IP supervision. If all qualified pilots have lost currency, flying unit commanders may select pilots to regain currency IAW paragraph **4.4.6.**

A17.5. UPGRADE TRAINING.

A17.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots selected for upgrade training to instructor status will complete the requirements in **Table A17.5.** Ground training will be completed prior to beginning flying training.

A17.5.1.1. Night Instructor Training. Night instructor training will not be accomplished.

Table A17.5. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67A2 & 68R1
Flying Training	AFMC Form 68R2
Aircrew Exams	As required by unit CC

A17.6. TRAINING RESTRICTIONS.

A17.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A17.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A17.8. F-117 TRAINING PLANS PRESCRIBED.

A17.8.1. General. F-117 prescribed training plans listed in **Table A17.6.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A17.6. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67R1 & 68R1 & R2
Chase Training	AFMC Forms 67R3 & 68R5
Air Demonstration Training	AFMC Forms 67R2 & 68R4
Advanced Handling Training	AFMC Forms 67R4 & 68R3
Pilot Instructor Upgrade	AFMC Forms 67A2, 67R1 & 68R2

Attachment 18

T-38 TRAINING GUIDELINES

A18.1. GENERAL.

A18.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC T-38 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional T-38 continuation training requirements.

A18.1.1.1. Additional Guidance. Additional guidance for T-38 ground and flying training may be found in MCI 11-238, *(A)T-38 Aircrew Operational Procedures*, MCMAN 11-238 Vol 1, *(A)T-38 Flying Fundamentals*, and MCMAN 11-238 Vol 2, *AT-38 Mission Employment Fundamentals*. These regulations are not directive to AFMC aircrews and are to be used as guidance only.

A18.1.2. Key Terms and Definitions.

A18.1.3. Aircrew Requirements and Qualifications.

A18.2. AIRCRAFT QUALIFICATION TRAINING.

A18.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements outlined in this section. Undergraduate Pilot Training (UPT) does not constitute sufficient training for a pilot to be considered qualified in the T-38. At the flying unit commander's discretion, qualification from another T-38 using command (i.e. AETC, ACC) or service (Navy) may constitute sufficient qualification training. Local qualification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience, length of time out of the aircraft.

A18.2.2. Ground and Flying Training Requirements.

A18.2.2.1. Aircrew will complete the T-38 ground training prescribed in **Table A18.1.** During local qualification training, cockpit procedures training (CPT), at the aircraft, in an aircrew training device, or in a table-top forum, will be accomplished prior to any flying training. All ground training will be accomplished by a current/qualified T-38 instructor. Pilots must have a working knowledge of cautions, warnings, operating limitations, and emergency procedures associated with the aircraft before beginning flying training.

A18.2.2.2. Maximum use will be made of ETCA formal training courses before entering flying training.

A18.2.2.3. Simulator training will be accomplished for pilots before beginning flying training. (Exception: If a T-38 is flown to the simulator location, these missions can count as training sorties.) Simulator missions will concentrate on normal and emergency procedures to amplify information briefed during ground training.

A18.2.2.4. WSO. Initial qualification WSO training in the T-38 will be accomplished using the HQ AFMC approved training plan. All WSOs qualifying in the T-38 must have been previously qualified as an instructor in a fighter weapon system (i.e. F-15E, F-4, F-111 etc.) and a graduate of the USAF Test Pilot School.

Table A18.1. T-38 Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67T1	1) Formal School 2) AFMC Form 67T1
Flying Training	1) Formal School or 2) AFMC Form 68T1	1) Formal School 2) AFMC Form 68T1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A18.2.3. Conversion Training. T-38 conversion training is required for aircrew to qualify in another T-38 aircraft category to include the T-38A or T-38C. Conversion training requirements are outlined in **Table A18.2.**

A18.2.3.1. Ground and Flying Training Requirements. Local conversion training for all model aircraft will consist of completion of the appropriate ground, CPT, and simulator training IAW paragraph **2.3.2.** of this instruction. Emphasis will be placed upon the differences between the models of the T-38. Additional training requirements will be as outlined by the flying unit commander.

Table A18.2. Conversion Training Requirements.

REQUIREMENT	PILOT	WSO/MISSION SUPPORT
Ground Training	AFMC Form 67T4 & 68T4	AFMC Form 67T4
Flying Training	AFMC Form 68T5	AFMC Form 68T6
Aircrew Exams	As required by unit CC	As required by unit CC

A18.3. MISSION QUALIFICATION TRAINING.

A18.3.1. General. **Table A18.3.** outlines the minimum ground and flying training needed to qualify aircrew members in T-38 mission elements. AFMC prescribed T-38 mission qualification training includes FCF, Chase, Low Altitude Step Down Training (LASDT) and Weapons Delivery. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A18.3.1.1. WSOs qualified in the T-38 will accomplish mission qualification as directed per the approved USAF TPS syllabus. T-38 WSOs will only fly in support of the TPS curriculum.

A18.3.1.2. Basic formation skills are not required for initial qualification in the T-38. Therefore, mission qualification training will include instruction in basic formation (fingertip, route, tactical, chase, formation takeoffs and landings, cross-unders, rejoins) as applicable to the unit mission.

A18.3.2. Functional Check Flight (FCF) Training.

A18.3.2.1. FCF training will be conducted IAW paragraph **3.4. Table A18.3.** outlines the minimum ground and flying training needed to qualify pilots in the FCF mission. A T-38 instructor qualified in the FCF mission will administer ground and flying training.

A18.3.3. Photo/Safety Chase Training. Photo/Safety Chase will be conducted IAW paragraph **3.6.** **Table A18.3.** outlines the minimum ground and flying training required to qualify pilots in the Photo/ Safety Chase mission.

A18.3.4. Low Altitude Step Down Training (LASDT). If the flying unit commander determines that flying low level below 500 feet is a mission requirement, aircrews must complete a HQ AFMC approved LASDT program. LASDT will be conducted IAW paragraph **3.7.**

A18.3.5. Weapons Delivery (WD) Training. If the flying unit commander determines that weapons delivery is a mission requirement, aircrews must complete a HQ AFMC approved Weapons Delivery training program. Weapons Delivery training will be conducted IAW paragraph **3.8.**

A18.3.5.1. Aircrew must have completed and be current in LASDT prior to conducting air-to-ground delivery training where delivery or recovery altitudes will be less than 500 feet AGL.

Table A18.3. FCF, Chase, and LASDT, and Weapons Delivery Training Requirements.

REQUIREMENT	PILOT FCF	PILOT CHASE	LASDT	WEAPONS DELIVERY
Ground Training	AFMC Form 67T2	AFMC Form 67T3	AFMC Form 67T6	AFMC Form 67T7
Flying Training	AFMC Form 68T2	AFMC Form 68T3	AFMC Form 68T8	AFMC Form 68T9
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC	As Required by unit CC

A18.4. CONTINUATION TRAINING.

A18.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, T-38 aircrew members will also accomplish the requirements in **Table A18.4.** and **Table A18.5.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

A18.4.2. The T-38A and T-38C are considered the same series for the purpose of maintaining currency according to AFI 11-202, Volume 1. Recurring qualification and instrument evaluations may be taken in either airframe. The flying unit commander may specify additional currency and proficiency requirements upon aircrews for specific categories of the T-38.

Table A18.4. Additional Currency Requirements.

AIRCRAFT	POSITION	TRAINING ITEM	NUMBER/FREQUENCY
T-38	Pilot	Conversion Sortie	1/180
		FCF Sortie	1/180
		Chase Sortie	1/180
		LASDT	1/90
		Weapons Delivery Sortie	1/180

Table A18.5. Additional Proficiency Training Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Chase Sortie	3	3	2	2	1	1

A18.4.3. Conversion Currency Requirements. Pilot conversion training currency is maintained by accomplishing a sortie every 180 days in each T-38 category aircraft (T-38A or T-38C) in which qualification is held.

A18.4.4. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 180 days. Aircrew members who exceed FCF currency requirements in **Table A18.4.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A18.4.5. Chase Currency/Recurrency Requirements. Chase Currency is maintained by accomplishing a Chase event every 90 days IAW paragraph **4.4.6.4.** Pilots who exceed currency requirements in **Table A18.4.** may regain currency by accomplishing a chase event under the supervision of a chase qualified instructor pilot. Loss of currency exceeding 6 months requires Chase mission qualification training IAW **Table A18.3.**

A18.4.6. LASDT Currency/Recurrency Requirements. LASDT currency is maintained by accomplishing LASDT event every 90 days IAW paragraph **4.4.6.5.** Aircrew members who exceed LASDT currency requirements in **Table A18.4.** may regain IAW paragraph **4.4.6.5.** Loss of currency exceeding 6 months requires LASDT mission qualification training.

A18.4.7. Weapons Delivery Currency/Recurrency Requirements. Weapons Delivery currency is maintained by accomplishing a weapons delivery event every 180 days. Aircrew members who exceed WD currency requirements in **Table A18.4.** may regain IAW paragraph **4.4.6.6.** Loss of currency exceeding 6 months requires WD mission qualification training.

A18.5. UPGRADE TRAINING.

A18.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots selected for upgrade training to instructor status will complete the requirements in **Table A18.6.** The upgrade candidate will attend AETC's Pilot Instructor Training (PIT) course if he or she has not been previously instructor-qualified in the T-38 or other aircraft. The flying unit commander may waive this requirement if experience or

other factors dictate a local instructor upgrade. Local instructor upgrade ground and flying training will be conducted according to **Table A18.6.** The flying unit commander may waive individual items in this training if the instructor candidate has undergone instructor upgrade in another unit aircraft.

A18.5.2. All WSOs must have been previously instructor qualified prior to qualifying in the T-38.

Table A18.6. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67A2 & 67T1
Flying Training	AFMC Form 68T1
Aircrew Exams	As required by unit CC

A18.6. TRAINING RESTRICTIONS.

A18.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A18.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A18.8. T-38 TRAINING PLANS PRESCRIBED.

A18.8.1. General. T-38 prescribed training plans listed in **Table A18.7.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A18.7. T-38 PRESCRIBED TRAINING PLANS.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67T1 & 68T1
Mission Support/Operational Support Flyer Qualification & Requalification Training	AFMC Forms 67T5 & 68T7
Pilot Conversion Training (T-38A to T-38C)	AFMC Forms 67T4 , 68T4, & 68T5
Mission Support Conversion Training (T-38A to T-38C)	AFMC Forms 67T4 & 68T6
FCF Training	AFMC Forms 67T2 & 68T2
Chase Training	AFMC Forms 67T3 & 68T3
LASDT Training	AFMC Forms 67T6 & 68T8
Weapons Delivery Training	AFMC Forms 67T7 & 68T9
Instructor Pilot	AFMC Forms 67A2, 67T1 & 68T1

Attachment 19

T-39 TRAINING GUIDELINES

A19.1. GENERAL.

A19.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC T-39 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional T-39 continuation training requirements.

A19.2. AIRCRAFT QUALIFICATION TRAINING.

A19.2.1. This section outlines prescribed initial and requalification training for the pilot crew position. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirement outlined in this instruction.

A19.2.2. Ground and Flying Training Requirements.

A19.2.2.1. Refer to Table A19.1. for qualification and requalification training requirements based on prior qualifications. Initial qualifications will be as first pilot or aircraft commander at the discretion of the flying unit commander, based on the crewmember's prior experience. Requalification training will be tailored to the individual after considering the experience and length of time out of the aircraft.

A19.2.2.2. Ground training will include both T-39A and T-39B systems and procedures if qualification will include both models.

A19.2.2.3. Flying training will:

A19.2.2.3.1. Be accomplished primarily in the left seat, however, one training mission may be flown in the right seat.

A19.2.2.3.1.1. Include one training mission flown as an out and back.

A19.2.2.3.2. Include one training mission flown from the right seat for first pilots.

A19.2.2.3.3. Include both the T-39A and T-39B to the maximum extent possible.

A19.2.2.4. If an initial flight evaluation is completed having flown in only one model, a flight in the other model will be completed with an instructor before performing crew duties in that model. Document this training in the individuals training folder.

Table A19.1. T-39 Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIALQUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67U1	1) Formal School 2) AFMC Form 67U1
Flying Training	1) Formal School or 2) AFMC Form 68U1	1) Formal School 2) AFMC Form 68U1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A19.3. MISSION QUALIFICATION TRAINING.

A19.3.1. General. Refer to **Table A19.2.** for minimum ground and flying training required to qualify pilots in T-39 mission elements. AFMC prescribed T-39 missions include Formation/Chase.

A19.3.2. Formation/Chase Training. Formation/Chase will be conducted IAW paragraph **3.6. Table A19.2.** outlines the minimum ground and flying training required to qualify pilots in the Formation/Chase mission.

A19.3.2.1. Training will include special techniques and positions for chase missions. A minimum of two missions will be flown to accomplish the applicable items of the formation/chase lesson plan.

A19.3.2.2. Formation/chase pilots upgrading to mission instructor will complete the applicable training outlined in **Table A19.2.**

Table A19.2. Formation/Chase Training Requirements.

REQUIREMENT	FORMATION/ CHASE PILOT	FORMATION/CHASE INSTUCTOR
Ground Training	AFMC Form 67U3	AFMC Form 67U3
Flying Training	AFMC Form 68U2	AFMC Form 68U2
Aircrew Exams	As Required by unit CC	As Required by unit CC

A19.4. CONTINUATION TRAINING.

A19.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, T-39 aircrew members will also accomplish the requirements in **Table A19.3.** and **Table A19.4.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A19.3. Additional T-39 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot, Copilot	Formation/Chase	1/90
	SFO Pattern	1/45

Table A19.4. Additional T-39 Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot, Copilot	Formation/Chase	3	3	2	2	1	1
	SFO Pattern	3	3	2	2	1	1
	Proficiency Sortie	3	3	2	2	1	1
	Simulated Engine Out Missed Approach	1	1	1	1	1	1
	Simulated Engine Out Landing	1	1	1	1	1	1

A19.4.2. Pilot Proficiency Sortie. Proficiency sortie requirements are specified in **Table A19.4.** A proficiency training sortie is credited when a pilot actively controls the aircraft for a minimum of one half hour of primary time and accomplishes at least five different events from the following list:

A19.4.2.1. Takeoff or departure.

A19.4.2.2. Penetration or letdown.

A19.4.2.3. Precision approach.

A19.4.2.4. Non-precision approach.

A19.4.2.5. VFR Pattern/Circling approach.

A19.4.2.6. Simulated emergency procedure.

A19.4.2.7. Landing (full stop or touch and go).

A19.4.2.8. Missed Approach/Go-around.

A19.4.2.9. Holding.

A19.4.2.10. Air work (unusual attitude recovery, steep turns or stalls).

A19.4.2.11. Simulated Engine Out Missed Approach.

A19.4.2.12. Simulated Engine Out Landing.

A19.4.3. Simulated dual flameout (SFO) patterns may be performed IAW the flight manual; AFI 11-202, Volume 3 AFMC Supplement 1; and local directives. T-39 instructor pilots may practice or supervise SFO landings (touch and go or full stop).

A19.5. UPGRADE TRAINING.

A19.5.1. Upgrade training will be conducted IAW paragraph **5.3. Table A19.5.** outlines the minimum ground and flying training required for aircraft commander and instructor upgrade. First pilots upgrading to aircraft commander will receive training while occupying the left seat. Pilots upgrading to instructor will receive training while occupying the right seat

Table A19.5. T-39 Aircraft Commander & Instructor Upgrade Training Requirements.

REQUIREMENT	AIRCRAFT COMMANDER UPGRADE	INSTRUCTOR UPGRADE
Ground Training	AFMC Form 67U1	AFMC Form 67U2
Flying Training	AFMC Form 68U1	AFMC Form 68U1
Aircrew Exams	As required by unit CC	As required by unit CC

A19.6. TRAINING RESTRICTIONS.

A19.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A19.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A19.8. T-39 TRAINING PLANS PRESCRIBED.

A19.8.1. General. T-39 prescribed training plans listed in **Table A19.6.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A19.6. – Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67U1 & 68U1
Formation/Chase	AFMC Forms 67U3 & 68U2
First Pilot to Mission Pilot	AFMC Forms 67U1 & 68U1
Instructor Pilot Upgrade Training	AFMC Forms 67A2, 67U2 & 68U1

Attachment 20

U-2 TRAINING GUIDELINES

A20.1. GENERAL.

A20.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC U-2 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional U-2 continuation training requirements.

A20.2. AIRCRAFT QUALIFICATION TRAINING.

A20.2.1. This section outlines prescribed initial and requalification training for the pilot crew position. Comply with AFI 11-202 Volume 1 guidance and appropriate training requirement outlined in this instruction.

A20.2.2. Ground and Flying Training Requirements.

A20.2.2.1. Refer to **Table A20.1.** for qualification and requalification training requirements based on prior qualifications. All initial qualification training will be accomplished at the ETCA formal course. Local requalification training, if approved, may only be conducted when a U-2 RT/ST is available.

A20.2.3. Local Area Orientation. This training will be completed IAW paragraph **1.8.2.** If the pilot is not familiar with R-2508, Edwards AFB flying complex, or Plant 42, Palmdale, a local area orientation brief is required prior to flying U-2 sorties. Pilots should accomplish local area training flying requirements during a dedicated low sortie (if available). The flying unit commander can approve LAO in another aircraft.

Table A20.1. Pilot Qualification and Requalification Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School 2) AFMC Form 67V6	1) Formal School 2) AFMC Form 67V6
Flying Training	1) Formal School or 2) AFMC Form 68V1	1) Formal School 2) AFMC Form 68V1
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A20.3. MISSION QUALIFICATION TRAINING.

A20.3.1. General. **Table A20.2.** outlines the minimum ground and flying training needed to qualify aircrew members in U-2 mission elements. AFMC prescribed U-2 mission qualification training includes FCF, Chase, and Flight Test. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A20.3.2. Prior to the mission qualification, an instructor will supervise all mission preparation activities, aircraft preflight, launch, and recovery.

A20.3.3. Functional Check Flight (FCF) Training.

A20.3.3.1. FCF training will be conducted IAW paragraph **3.4. Table A20.2.** outlines the minimum ground and flying training needed to qualify pilots in the FCF mission. A U-2 instructor qualified in the FCF mission will administer ground training. Flying training will be conducted under the supervision of an FCF qualified instructor from the mobile vehicle and control room in lieu of airborne chase

A20.3.4. Photo/Safety Chase Training. Planned formation flights in the U-2 require U-2 safety chase mission qualification. Chase training will be conducted IAW paragraph **3.6. Table A20.2.** outlines the minimum ground and flying training required to qualify pilots in the Photo/Safety Chase mission. Initial U-2 chase qualification will be accomplished on a dedicated training sortie with two U-2 aircraft.

A20.3.5. Flight Test Training. Flight Test training will be conducted IAW paragraph **3.10. Table A20.2.** outlines the minimum ground and flying training needed to qualify aircrew members in the Flight Test mission. A U-2 instructor qualified in the Flight Test mission will administer ground and flying training.

A20.3.6. Specialized Training. At the discretion of the U-2 CTF Operations Officer some specific test plans, test programs, or on-board systems may require unique specialized training. Normally this will consist of specialized ground training. Security classification may prevent full documentation.

Table A20.2. FCF, Chase, and Flight Test Training Requirements.

REQUIREMENT	PILOT FCF	PILOT CHASE	FLIGHT TEST
Ground Training	AFMC Form 67V3	AFMC Form 67V4	AFMC Form 67V2
Flying Training	AFMC Form 68V4	AFMC Form 68V5	AFMC Form 68V3
Aircrew Exams	As Required by unit CC	As Required by unit CC	As Required by unit CC

A20.4. CONTINUATION TRAINING .

A20.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, U-2 aircrew members will also accomplish the requirements in **Table A20.3.** and

A20.4.1.1. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A20.3. Additional U-2 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Takeoff	1/45
	Touch and Go	1/120
	Night Landing	1/30
	No Flap Landing	1/120
	SFO	1/120
	FCF Sortie	1/180
	Chase Sortie	1/180

Table A20.4. Additional U-2 Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Sortie	24	20	16	12	8	4
	Proficiency Sortie	2	2	2	1	1	1
	Night Sortie	1	1	1	1	1	1
	Touch and Go	6	5	4	3	2	1
	Night Landing	3	3	2	2	1	1
	Missed Approach	2	2	2	1	1	1
	No-flap landing	3	3	2	2	1	1
	SFO	6	5	4	3	2	1

A20.4.2. Proficiency Sortie. Proficiency training sorties are not flown with Primary Mission Equipment (PME) on-board therefore a minimum of two dedicated training sorties will be flown each half per **Table A20.4.** A qualified SOF in the mobile vehicle will monitor these sorties. A transition sortie is credited when a pilot accomplishes a minimum of the following:

A20.4.2.1. 3 Touch and Go Landings.

A20.4.2.2. 2 SFOs.

A20.4.2.3. 1 No Flap Landing.

A20.4.3. FCF Currency/Recurrency Requirements. FCF currency is maintained by accomplishing an FCF sortie/profile every 180 days. Aircrew members who exceed FCF currency requirements in **Table A20.3.** may regain currency by reviewing an FCF profile with an FCF qualified instructor pilot and accomplishing an FCF sortie with a current/qualified FCF instructor. Loss of currency exceeding 6 months requires FCF mission qualification training.

A20.4.4. Chase Currency/Recurrency Requirements. Chase Currency is maintained by accomplishing a Chase event every 180 days IAW paragraph **4.4.6.4.** Pilots who exceed currency requirements in **Table A20.3.** may regain currency by accomplishing a chase event under the supervision of a chase

qualified instructor pilot IAW **4.4.6.4.2.** Pilots with prior U-2 chase experience may maintain and regain chase currency in any aircraft (i.e., T-38), but must accomplish the appropriate training. Loss of currency exceeding 6 months requires Chase mission qualification training IAW **Table A20.2.**

A20.5. UPGRADE TRAINING.

A20.5.1. Upgrade training will be conducted IAW paragraph **5.3.** Pilots selected for upgrade training to instructor status will complete the requirements in **Table A20.5.**

A20.5.2. When accepting instructor qualification of a newly assigned and current U-2RT/ST IP, the required ground training lesson plan will be accomplished IAW paragraph **5.3.2.3.**

A20.5.3. The 1st RS, 9th RW, will normally accomplish instructor pilot checkout ground and flying training, Beale AFB, CA. Local instructor upgrade training will be conducted/approved IAW paragraph **5.3.1.**

Table A20.5. Instructor Pilot Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	1) Formal School 2) AFMC Form 67V6
Flying Training	1) Formal School 2) AFMC Form 68V1
Aircrew Exams	As required by unit CC

A20.6. TRAINING RESTRICTIONS.

A20.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A20.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A20.8. U-2 TRAINING PLANS PRESCRIBED.

A20.8.1. General. U-2 prescribed training plans listed in **Table A20.6.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A20.6. – Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
Pilot Qualification & Requalification Training	AFMC Forms 67V6 & 68V1
Local Area Orientation	AFMC Forms 67V1 & 68V2
FCF Training	AFMC Forms 67V3 & 68V4
Chase Training	AFMC Forms 67V4 & 68V5
Flight Test Training	AFMC Forms 67V2 & 68V3
SOF	AFMC Forms 67V5
Instructor Pilot	AFMC Forms 67A2, 67V6 & 68V1

Attachment 21

UH-1 TRAINING GUIDELINES

A21.1. GENERAL.

A21.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC UH-1 aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional UH-1 continuation training requirements.

A21.1.2. Key Terms and Definitions.

A21.1.3. Aircrew Requirements and Qualifications.

A21.1.3.1. Aircrew Requirements. The flying unit commander will determine the requirement for crew complement based on flight manual and unit training requirements.

A21.2. AIRCRAFT QUALIFICATION TRAINING.

A21.2.1. General. This section outlines prescribed initial, requalification, conversion and difference training for pilots and flight engineers. Comply with AFI 11-202, Volume 1 guidance and appropriate training requirements as outlined in this section. Pilots complete the appropriate undergraduate pilot training course with follow-on Phase I training leading to a qualification in a specific MDS. Test pilot candidates complete the US Navy Test Pilot School curriculum and follow-on Phase I training prior to assignment as a qualified helicopter test pilot

A21.2.2. Ground Training Requirements. Complete the training requirements outlined in **Table A21.1.** (pilots and flight engineers). Pilot and flight engineer local qualification training will follow ETCA formal course syllabi to the maximum extent possible. Emphasis should be placed on a thorough review of aircraft systems/equipment, cockpit orientation, and normal/emergency procedures. All systems and components not covered in training due to differences between the simulator and the UH-1 being trained in, will be covered in detail by an instructor during the aircraft visit. Requalification training will be tailored to the individual with additional requirements determined by the flying unit commander after considering experience and length of time out of the aircraft.

A21.2.2.1. Simulator Training. For local training ETCA formal simulator training is required and will be conducted IAW paragraph **2.3.2.**

A21.2.3. Flying Training Requirements.

A21.2.3.1. Complete the training requirements outlined in **Table A21.1.** (pilots and flight engineers). Copilots will accomplish Phase I training in the left seat. However, those items accomplished in the right seat may be demonstrated to the student. To provide continuity of training, time between training flights will be kept to a minimum.

Table A21.1. Pilot/Flight Engineer Qualification/Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NON-CURRENT OVER 5 YEARS
Ground Training	1) Formal School	1) Formal School
Flying Training	1) Formal School or 2) Unit Developed	1) Formal School
Aircrew Proficiency Exams	Open & Closed Book	Open & Closed Book

A21.2.4. Difference Training. UH-1 difference training is required for aircrew to qualify in another UH-1 aircraft series. Difference training requirements will be specified in unit supplements to this instruction.

A21.3. MISSION QUALIFICATION TRAINING.

A21.3.1. General. Table A21.2. and Table A21.3. outline the minimum ground and flying training needed to qualify pilots and flight engineers in UH-1 mission elements. AFMC prescribed UH-1 mission qualification training includes FCF, Low Level, Paradrop, Control Burn, and Fire Bucket, and NVG. Minimum aircrew qualifications and additional unit specific mission training and associated will be established by the flying unit commander and included in the unit supplement to this instruction.

A21.3.2. Basic Mission Training. Basic mission training includes those missions inherent to the capabilities of the helicopter. Qualification in the basic missions below is normally attained by formal school attendance. If accomplished in-unit, use formal school courseware, or MAJCOM training forms, as applicable. All helicopter pilots and flight engineers will receive basic mission training, to include the following:

A21.3.2.1. Remote Site Operations. This training qualifies aircrews to operate into and from unprepared surfaces and confined areas.

A21.3.2.2. AIE. This training qualifies aircrews to conduct overland insertions and extractions using the rescue hoist, fast rope, rope ladder, etc.

A21.3.2.3. Search Operations. This training familiarizes aircrews with search techniques.

Table A21.2. FCF, Low Level, and Paradrop Training Requirements.

REQUIREMENTS	FCF	LOW LEVEL	PARADROP
Ground	AFMC Form 67W1	AFMC Form 67W4	AFMC Form 67W2
Flying	AFMC Form 68W1	AFMC Form 68W4	AFMC Form 68W2

Table A21.3. Control Burn, Fire Bucket & NVG Training Requirements.

REQUIREMENTS	CONTROL BURN	FIRE BUCKET	NVG
Ground	AFMC Form 67W3	AFMC Form 67W5	Unit Developed
Flying	AFMC Form 68W3	AFMC Form 68W5	Unit Developed

A21.3.3. Functional Check Flight (FCF) Training. FCF training will be conducted IAW paragraph **3.4. Table A21.2.** outlines the minimum ground and flying training needed to qualify pilots in the FCF mission. Training will include a review of preflight procedures, technical orders, checklists, and documentation. FCF candidates will complete at least one supervised, full-profile FCF during training.

A21.3.4. Low Level Navigation Training. This training qualifies UH-1 aircrews to operate continuously below 300' AGL. Previous Day Tactical/Low-Level qualifications satisfy this training requirement; document acceptance of the previous qualification in the aircrew training folder IAW paragraph **1.7.4.** UH-1 low-level training will be accomplished IAW paragraph **3.5.** and the requirements outlined in **Table A21.2.**

A21.3.5. Paradrop Training. This training qualifies UH-1 aircrews to perform paradrop operations. UH-1 Paradrop training will be accomplished IAW the requirements outlined in **Table A21.2.**

A21.3.6. Control Burn Training. This training qualifies UH-1 aircrews to perform control burn bucket operations. UH-1 Control Burn training will be accomplished IAW the requirements outlined in **Table A21.3.**

A21.3.7. Fire Bucket Training. This training qualifies UH-1 aircrews to perform fire bucket operations. UH-1 Fire Bucket training will be accomplished IAW the requirements outlined in **Table A21.3.**

A21.3.8. Night Vision Goggle (NVG) Training. This training qualifies aircrews to conduct night flight operations using NVGs. NVG qualification training will be developed and tailored to specific mission requirements. Local training programs will be developed IAW paragraph **1.7.2.** using formal school courseware to the maximum extent possible. Training programs will incorporate the step-down process where altitudes and illumination requirements are commensurate with the experience level of the trainee. Minimum experience required for upgrade to NVG certification is outlined in **Table A21.4.**

A21.3.8.1. For NVG training, crewmembers must complete an initial ground training certification course, emphasizing preflight procedures and goggle optimization and limitations, prior to their initial flight with NVGs. An appropriately trained instructor, assisted by a flight surgeon or a designated representative, will conduct this course (see AFI 48-123, *Medical Examination and Standards*).

Table A21.4. Prerequisites for NVG Certification.

CERTIFICATION TO	MINIMUM TOTAL HELICOPTER HOURS	HOURS IN DESIGN AIRCRAFT	REMARKS
NVG Copilot	500	300	
NVG Aircraft Commander	500	300	And 50 NVG hours
NVG Flight Engineer	300	150	

A21.4. CONTINUATION TRAINING .

A21.4.1. General. In addition to the minimum currency and proficiency requirements in **Table 7.** and **Table 8.** of this instruction, UH-1 aircrew members will also accomplish the requirements in **Table A21.5.** and **Table A21.6.** The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A21.5. Additional UH-1 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Takeoff	1/45

Table A21.6. Additional UH-1 Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Remote Operations	1	1	1	1	1	1
	Emergency Procedures (1) (2)	2	2	2	1	1	1
	AIE (3)	2	2	2	1	1	1
	External Load Operations	1	1	1	1	1	1
	NVG Operations	3	3	2	2	1	1
Flight Engineer	Remote Operations	1	1	1	1	1	1
	Emergency Procedures (1) (2)	2	2	2	1	1	1
	AIE (3)	2	2	2	1	1	1
	External Load Operations	1	1	1	1	1	1
	NVG Operations	3	3	2	2	1	1

NOTES:

1. Up to 50 percent of this requirement may be logged in a HQ AFMC/DOV approved simulator. See **Table 9.** for approved simulators.

2. Emergency procedures sortie will include those procedures outlined in AFI 11-2FT, Vol 3. Instructors may credit one sortie per quarter when supervising an emergency procedures sortie.

3. At least one will be over water for units maintaining a water rescue capability.

A21.4.2. Sortie Requirements. To credit a sortie for currency, crewmembers must participate in the completion of the following events as applicable to their respective crew position (pilot, copilot, or flight engineer): Mission planning (flight clearance, TOLD computation, etc.), crew briefing, crew coordination, taxi procedures, and takeoff, enroute, and landing procedures.

A21.4.2.1. Pilots must occupy a seat with a set of controls, and all crewmembers must log either primary, secondary, instructor, or evaluator time (or some combination thereof) but no less than one-half hour primary time.

A21.4.2.2. Crewmembers may log more than one sortie per calendar day; however, the events listed above must be re-accomplished for each sortie logged, day or night.

A21.4.3. Emergency Procedures (EP) Sortie requirements. In addition to the maneuvers listed in AFI 11-2FT, Volume 3, UH-1 crewmembers must accomplish the following events to complete an EP sortie:

A21.4.3.1. Review of all boldface procedures (either on the ground, in-flight, or some combination of ground or in-flight),

A21.4.3.2. A minimum of one straight-ahead and one turning autorotation.

A21.4.3.3. EP sortie events should be accomplished on a single flight.

A21.5. UPGRADE TRAINING.

A21.5.1. Upgrade training will be conducted IAW paragraph **5.3. Table A21.7.** outlines the minimum ground and flying training required for aircraft commander and instructor upgrade. First pilots upgrading to aircraft commander will receive training while occupying the right seat. Pilots upgrading to instructor will receive training while occupying the left seat.

Table A21.7. UH-1 Aircraft Commander & Instructor Upgrade Training Requirements.

REQUIREMENT	AIRCRAFT COMMANDER UPGRADE	INSTRUCTOR UPGRADE
Ground Training	1) Formal School or 2) Unit Developed	1) Formal School or 2) Unit Developed
Flying Training	1) Formal School or 2) Unit Developed	1) Formal School or 2) Unit Developed
Aircrew Exams	As required by unit CC	As required by unit CC

A21.6. TRAINING RESTRICTIONS.

A21.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A21.7. ADDITIONAL TRAINING. Additional training, as applicable, will be specified in unit supplements to this instruction.

A21.8. UH-1 TRAINING PLANS PRESCRIBED.

A21.8.1. General. UH-1 prescribed training plans listed in Table A21.9 will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A21.8. Prescribed Training Plans.

TYPE OF TRAINING REQUIRED	FORM NUMBER
FCF Training	AFMC Forms 67W1 & 68W1
Pilot Low Level Training	AFMC Forms 67W4 & 68W4
Paradrop Training	AFMC Forms 67W2 & 68W2
Control Burn Training	AFMC Forms 67W3 & 68W3
Fire Bucket Training	AFMC Forms 67W5 & 68W5

Attachment 22

F-22 TRAINING GUIDLINES

A22.1. GENERAL.

A22.1.1. AFI 11-202 Volume 1, AFMC Supplement 1, this instruction and approved test plans will be used to qualify AFMC crewmembers in F-22 aircraft (initial, requalification, conversion, difference, mission, and upgrade training) as applicable.

Attachment 23

RQ-4A TRAINING GUIDELINES

A23.1. GENERAL.

A23.1.1. This attachment outlines the minimum ground and flying training required to qualify AFMC crewmembers in AFMC RQ-4A aircraft (qualification, mission, and upgrade training) if authorized by AFI 11-202, Volume 1. In addition, it prescribes additional RQ-4A continuation training requirements.

A23.1.2. Key Words and Definitions.

A23.1.2.1. Companion Trainer – A general aviation aircraft used to maintain civil instrument currency. (i.e. Aero Club Cessna 172).

A23.1.2.2. Common Ground Station (CGS) – Consists of a Launch and Recovery Element (LRE) and Mission Control Element (MCE) that contain the equipment and workstations necessary to control the aircraft and manage the mission payload and sensors.

A23.1.2.3. Launch and Recovery Element (LRE) – The element of the CGS that houses communications and aircraft control subsystems. The LRE contains a pilot and mission planning operator workstations and is primarily used for launch and recovery of the aircraft.

A23.1.2.4. Mission Control Element (MCE) – A ground segment consisting of four workstations for the mission commander, pilot, communications operator, and Image Quality Control. The MCE is used primarily during the enroute and imagery collection phase of the mission.

A23.2. AIRCRAFT QUALIFICATION TRAINING. Complete the training listed in **Table A23.1.**

A23.2.1. Prerequisites. Candidates must meet the following requirements before entry into RQ-4A qualification training:

A23.2.1.1. USAF pilot with a current military instrument qualification.

A23.2.1.2. USAF navigator with a FAA commercial pilot certificate and current instrument rating.

A23.2.1.3. Civilian contract pilot with a FAA commercial pilot certificate, current instrument rating (or military equivalent) and current FAA medical certificate (or military equivalent)**.**

Table A23.1. RQ-4A Pilot Qualification and Requalification Training Requirements.

REQUIREMENT	UNQUALIFIED 2 TO 5 YEARS	INITIAL QUALIFICATION OR NONCURRENT OVER 5 YEARS
Ground Training	AFMC Form 67Z1	AFMC Form 67Z1 and HQ AFMC approved courseware.
Flying Training	AFMC Form 68Z1 and 68Z2	AFMC Form 68Z1, 68Z2 and HQ AFMC approved courseware.
Aircrew Proficiency Exams	Open and Closed Book	Open and Closed Book

A23.3. MISSION QUALIFICATION TRAINING.

A23.3.1. General. AFMC prescribed RQ-4 mission qualification training does not exist. Minimum aircrew qualifications and associated unit specific mission training will be established by the flying unit commander and included in the unit supplement to this instruction.

A23.4. CONTINUATION TRAINING.

A23.4.1. General. Minimum currency and proficiency requirements are specified in **Table A23.2.**, **Table A23.3.** and **Table A23.4.**. The flying unit commander may specify additional requirements necessary to ensure aircrew members maintain proficiency and mission readiness. Include these requirements in a supplement to this instruction.

Table A23.2. RQ-4A Pilot Basic Currency Requirements.

EVENT	CURRENCY
Flight Physical (1)	IAW paragraph **4.2.**
EP Simulator	1/180
Flight Evaluation	IAW AFI 11-2FT Vol 2
Instrument Refresher Course	IAW AFI 11-2FT Vol 2
Crew Resource Management	IAW paragraph **4.2.**
Recent Instrument Experience (2) (3)	IAW FAR Part 61.57
Flight Review (2) (4)	IAW FAR Part 61.56
Notes:	
1. Physical IAW AFI 48-123 or FAA Medical Certificate (Class 1, 2, or 3).	
2. N/A for pilots with current military instrument qualification	
3. Accomplished within the previous six months, six instrument approaches, holding, procedures and intercepting and tracking courses. Pilots will perform and log this experience under actual or simulated instrument conditions in a designated companion trainer.	
4. Accomplished within the previous 24 months.	

A23.4.2. Global Hawk Pilots who are non-current for any requirement listed in **Table A23.3.** are restricted from performing flight/mission duties and will regain currency IAW AFI 11-202 V1 Para 1.6.

Table A23.3. RQ-4 Currency Requirements.

POSITION	TRAINING ITEM	NUMBER/FREQUENCY
Pilot	Sortie (1)	1/45
	Takeoff (2) (3)	1/120
	Landing (2)	1/120
	MCE (Payload MSN)	1/180

NOTES:

1. Credit for sorties is awarded for Sim, Flight, or Taxi/Takeoff Abort events. At least one Sortie must be in the Sim and one must be in the MCE or LRE during actual flight.

2. May be accomplished in either the LRE or MCE during actual flight. Credit is only awarded to the pilot controlling the aircraft on Takeoff and Landing.

3. Takeoff credit is awarded for accomplishing Taxi tests and Takeoff Abort tests.

Table A23.4. Additional RQ-4A Proficiency Requirements.

POSITION	TRAINING ITEM	MONTHS AVAILABLE					
		6	5	4	3	2	1
		NUMBER REQUIRED					
Pilot	Sortie (1)	6	5	4	3	2	1
	Takeoff (2) (3)	2	2	2	1	1	1
	Landing (2)	2	2	2	1	1	1

NOTES:

    1. Credit for sorties is awarded for Sim, Flight, or Taxi/Takeoff Abort events. At least one Sortie must be in the Sim and one must be in the MCE or LRE during actual flight.

    2. May be accomplished in either the LRE or MCE during actual flight. Credit is only awarded to the pilot controlling the aircraft on Takeoff and Landing.

    3. Takeoff credit is awarded for accomplishing Taxi tests and Takeoff Abort tests.

A23.5. UPGRADE TRAINING .

A23.5.1. Upgrade training will be conducted IAW paragraph **5.3. Table A23.5.** outlines the minimum ground and flying training required for instructor upgrade.

Table A23.5. RQ-4A Upgrade Training Requirements.

REQUIREMENT	INSTRUCTOR UPGRADE
Ground Training	1) Formal School 2) AFMC Form 67Z1
Flying Training	1) Formal School 2) AFMC Form 68Z1 and 68Z2
Aircrew Proficiency Exams	Not required

A23.6. TRAINING RESTRICTIONS.

A23.6.1. General. Training restrictions are outlined in AFI 11-2FT, Volume 3.

A23.7. ADDITIONAL TRAINING.

A23.7.1. Hawkeye Ground Chase. The flying unit commander will designate Hawkeye Ground Chase safety observer candidates. Candidates must be a USAF rated officer or USAF Flight Test Engineer. Conduct Hawkeye training in accordance with AFFTC Form 67Z4.

A23.8. RQ-4 TRAINING PLANS PRESCRIBED.

A23.8.1. General. RQ-4 prescribed training plans listed in **Table A23.6.** will be used by all flying units as directed in this instruction. Training plans tailored to unit specific aircraft, crew position, and/ or mission will be approved by HQ AFMC/DOV and included in unit supplements to this instruction IAW paragraph **1.2.5.**

Table A23.6. RQ-4A Prescribed Training Forms.

TYPE OF TRAINING	REQUIRED FORM
Pilot Qualification & Requalification Training	AFMC Form 67Z1, 68Z1 and 68Z2
Hawkeye Ground Chase	AFMC Form 67Z2
Pilot Instructor Upgrade Training	AFMC Form 67A2, 68Z1 and 68Z2

Attachment 24

HH-60 TRAINING GUIDELINES

A24.1. GENERAL.

A24.1.1. AFI 11-2HH-60 Volume 1 will be used to qualify AFMC crewmembers in AFMC HH-60 aircraft (initial, requalification, conversion, difference, mission, and upgrade training)

Attachment 25

MH-53 TRAINING GUIDELINES

A25.1. GENERAL.

A25.1.1. AFI 11-2MH-53 Volume 1 will be used to qualify AFMC crewmembers in AFMC MH-53 aircraft (initial, requalification, conversion, difference, mission, and upgrade training)